The RUBBER AGE

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LATE NEWS of the Industry

Congress Still Maintains Air of Uncertainty in Debating on Rubber Tax—

Original Import Levy of 5 Cents Per Pound on Crude Rubber Now Changed to Manufacturers Sales Tax on Tires and Tubes—Industry Puts Up Stiff Opposition

THE original proposal of the Senate Finance Committee to tax crude rubber 5 cents per pound, as reported in these columns a fortnight ago, has now been changed to a form of manufacturers sales tax with levies of 3 cents per poundage per tire and 5 cents per poundage per inner tube. The bill is still to be threshed out on the floor of the Senate and in conference between the two houses of Congress, so that anything may happen before final passage.

In the uncertainty of the situation, prices advanced to the 4 cent level for rubber on the Rubber Exchange of New York on the advice of the import duty of 5 cents per pound, only to recede a few days later, in a panicky market, to the low record of 2.75 cents per pound, on the news that the import duty idea had been discarded in favor of the excise tax on tires.

The excise tax of 3c a pound on tires and 5c on tubes will raise the price of an average tire about 48c, or from 10 to 12½ per cent. This higher price, by encouraging longer life for tires, may cut the consumption of rubber even further, it is said.

The excise tax affects all manufacturers equally, while the crude import levy would hit especially, for the time being, manufacturers without substantial supplies of crude on hand.

The new tax, it was estimated, would yield $40,000,000 as against $53,000,000 expected from the crude rubber duty.

An interesting development in connection with the rubber duty proposal was the knowledge that Canadian Government officials here were sounding out the trade on a proposal for the establishment of an exchange in Canada, possibly at Montreal. The rubber could be delivered duty free in Canada from England or the Far East, manufactured at plants of American subsidiaries and Canadian rubber firms there; and rubber tires, footwear and other sundry goods, then shipped to the United States at favorable costs despite the 10 per cent ad valorem duty.

Akron tire manufacturers, Congressman Francis Seiberling, the Akron chamber of commerce, the Akron Tire Dealers' Association, and in fact every available organized industrial group in the Greater Akron area are to mobilize resources and concentrate influences in Washington in determined opposition to the proposed manufacturers' excise tax on tires.

The compromise that was effected when the senate finance committee in the national capital abandoned its previous decision as to an import duty on raw rubber and replaced that section with an excise tax of 3 cents a pound on tire casings and 5 cents a pound on inner tubes was not agreed to by the Akron group present, Washington dispatches declared.

Scanning the Headlines

Taxing of* RUBBER *is still under consideration in Congress with no definite proposal yet made a part of the revenue bill . . . . More* TIRES *and* TUBES *were produced in March than in February, but April consumption of crude rubber shows drop . . . . GOODRICH re-elects all officers at annual meeting . . . . GENERAL Tire and Rubber drops negotiations to acquire FISK . . . . Chicago Rubber Group hears talk on rubber cements and elects officers . . . . AKRON companies encourage home gardens for employes . . . . Average tire dealer is holding only 66.2 tires, according to April dealers' stocks survey by Department of Commerce.

That statement is supported also by members of the Akron committee who returned from Washington.

"We did oppose any further burden on the industry," said S. M. Jett, secretary of the B. F. Goodrich Co., "and it has been suggested that we assemble later for the purpose of fighting the excise tax section on the floor of the senate."

"The excise tax provision, according to opinion of the Akron manufacturers means roughly that an additional 20 per cent must be added to tire invoices," said Jett.

"The senate committee told us flatly that it was proposed to realize an additional fifty or fifty-two millions in revenue out of the rubber industry," he said. "There was, of course, considerable difference of opinion as to how such an amount could be raised."

Included in the Akron delegation were Jett, S. G. Carkhuff, secretary of the Firestone Tire & Rubber Co., C. A. Stillman, vice-president of the Goodyear Tire & Rubber Co., William S. Wolfe, executive vice-president of the Seiberling Rubber Co., and Congressman Francis Seiberling. C. A. Viles, secretary of the Rubber Manufacturers' Association, acted as spokesman.

As the average casing weighs about sixteen pounds, it is estimated the taxes will add from 45 to 50 cents to the cost to the consumer. The tax on tubes will add another five or ten cents. The price advances are expected to cover this tax, and it is thought likely that the larger advances will fall upon inner tubes.

Prices for tires are now the lowest on record. Standard balloon casings range, as quoted by a leading manufacturer, from $4.79 to $7.53, depending on the size. Truck and bus tires, having fourteen plies against the passenger car six, and being far heavier, range from $15.45 to $61.65. Inner tubes, also at the lowest point recorded, are $1.03 to $2.05 for the ordinary sizes.

Production of Tires and Tubes Increased in March Over February

SHIPMENTS of pneumatic casings for the month of March amounted to 2,954,040 casings, an increase of 15.7% over February this year, but were 28.3% below March 1931, according to statistics released by The Rubber Manufacturers Association.

This organization reports production of pneumatic casings for March to be 3,671,090 casings, a decrease of 5.2% under February this year and 21.3% below March 1931.

Pneumatic casings on hand March 31st amounted to 9,877,823 units, an increase of 7.7% over February, although 1.4% below March 31, 1931.

The actual comparative figures are as follows:

Pneumatic Casings

	Shipments	*Production*	*Inventory*
March, 1932	2,954,040	3,671,090	9,877,823
Feb., 1932	2,552,861	3,871,220	9,172,245
March, 1931	4,121,531	4,662,576	10,014,490

Consumption of Crude Rubber In April Marks Another Monthly Drop

CONSUMPTION of crude rubber by manufacturers in the United States for the month of April amounted to 25,953 long tons as compared with 27,828 long tons for March 1932, and represents a decrease of 6.7%, according to statistics released by the Rubber Manufacturers Association.

This organization reports imports of crude rubber for the month of April to be 37,017 long tons, a decrease of 12.7% below March and 20.6% under April a year ago.

This Association estimates total domestic stocks of crude rubber on hand April 30, at 343,098 long tons, which compares with March 31 stocks of 334,566. April stocks show an increase of 2.6% above March of this year and 50.2% above the stocks of April 30, 1931.

The participants in the compilation report 40,387 long tons of crude rubber afloat for the United States ports on April 30th which compares with 44,190 long tons afloat on March 31, 1932, and 42,525 long tons afloat on April 30, 1931.

Chicago Rubber Group Hears Talk On Latex Cements and Elects Officers

THE Chicago Rubber Group held the last meeting of the season on Friday, May 13th, at the Hotel Sherman, Chicago. The meeting proper was preceded by a dinner held in the College Inn of the Hotel. After the dinner the members held the annual election in the Grey Room.

The following officers were elected for the ensuing year: chairman, U. H. Parker, chief chemist of the Featheredge Rubber Company; vice-chairman, Wm. Collier, chief chemist, Johns-Manville Corporation at Waukegan, Ill.; secretary-treasurer, Ben W. Lewis, technical sales department, Wishnick-Tumpeer, Inc.

The speaker of the evening was Wm. A. Moore of the Rubber Service Laboratories, Inc., whose subject was "Some Recent Developments in Latex Cements." Mr. Moore's talk was of timely interest and was enjoyed by those present.

At the close of the discussion on Mr. Moore's paper the members went on record as favoring the holding of future meetings at the Midland Club, Chicago.

The Chicago Rubber Group is assisting the Chicago Section of the American Chemical Society to house the activities of the affiliated technical organizations in a Chemical Center.

Goodrich Re-elects All Officers At Annual Directors Meeting

JAMES D. TEW was renamed president of The B. F. Goodrich Company May 4 at the annual meeting of the board of directors in New York.

The board meeting followed the annual meeting of stockholders at which David M. Goodrich, son of the founder; S. M. Jett, A. H. Marks and C. B. Raymond, retiring directors, were re-elected.

The entire executive roster of the company was confirmed by the board. Those renamed are:

David M. Goodrich, chairman of the board; C. B. Raymond, vice-chairman and vicepresident; W. A. Means, vice-president; S. B. Robertson, vice-president and general manager of the tire division; J. H. Connors, vice-president and general manager of the mechanical goods division; A. B. Newhall, vice-president and general manager of the footwear division; T. G. Graham, vice-president, and R. T. Griffiths, general manager of the sundries division.

D. M. Goodrich, George M. Moffett, Charles S. McCain and S. J. Weinberg, members of the executive committee; S. M. Jett, secretary; V. I. Montenyohl, treasurer; T. B. Tomkinson, comptroller; A. M. Moss, director of purchases; J. L. McKnight and W. E. Eakin, assistant secretaries; L. L. Smith, assistant treasurer; W. M. Bechler and H. V. Gaertner, assistant comptrollers.

Exhibit of Products Made With Gastex Shown in New Doherty Building

IN connection with the opening early this month of the new Sixty Wall Tower, the 67-story building erected at 70 Pine Street, New York City, by Henry L. Doherty & Company, an interesting exhibit of many of the Doherty interests is included in a large exhibition room on the first floor of the building.

Among the exhibits are many of the products in which Gastex, the carbon black manufactured by the General Atlas Carbon Company, is used. A number of the leading rubber companies have contributed various of their products made with Gastex, among which was an interesting showing of belting, boots and shoes, gaskets, packing, tiling, matting, plumbers' molded goods, tubing, hose, and various small molded articles by the U. S. Rubber Company.

The exhibit furnished by the B. F. Goodrich Company included hose, tubing, typewriter platens, windshield strips, packing, belting, stamp gum, and boots and shoes. Products of other companies included all-rubber hose, soles, heels, and various similar products. In addition a number of publications were exhibited which were printed with ink made with Gastex. There was also shown some of the equipment used in rubber laboratories including a flexing machine and abrasion tester. In addition to the samples of Gastex there were shown various compounding materials such as clay, glue, softeners, accelerators, zinc oxide, wax, mineral rubber, sulphur, and whiting. Various types of rubber were also included—crude, reclaimed and compounded. The exhibit is open to the public and may be visited at any time.

British Goodrich to Reopen Stepney Tire Works at Early Date

LIEUTENANT-COMMANDER Sir Hugh Dawson, R. N., and Henry B. Potter, directors of the British Goodrich Rubber Co., have joined the board of the Stepney Tire & Rubber Co., which has taken over the Stepney Tire Works at Walthamstow.

Comparative Tire Exports 1st Quarter, 1932

GREAT BRITAIN exported more tire casings during the first quarter of the present year than the United States. The following table, prepared by the Department of Commerce, sets forth the officially reported number of automobile casings exported from the United States, and the United Kingdom to foreign markets throughout the world; during the first quarter of 1932. The Canadian official statistics given include motorcycle and automobile casings. French export statistics covering automobile casings and tubes are officially reported by gross weight only; the number of automobile casings shown as exported is an estimate of 1 casing for each 10 kilograms based on the officially reported weight. The compilation of this table is rendered possible through the purchase of British and French export statistics from a fund established by the Rubber Manufacturers' Association, Inc.

The total casings reported as shipped to a particular market is the equivalent of the exports into the market during the same period. Time allowance must be made for shipments to reach destinations. Allowances for re-exports and trans-shipments are considerable for some countries.

No. of Casings

United States	284,997
Canada	97,300
United Kingdom	287,213
France	177,590
Total	847,100

Germany's Rubber Goods Trade

CONSIDERING the economic plight of the world at large and that of Germany in particular, German rubber goods exports held up well during 1931, according to the Department of Commerce. When serious declines were registered in the export trade of competing countries, the total value—$22,638,419—of German exports for the year was only 15 per cent below that in 1930, and was exceeded by that for the United States and United Kingdom only. Imports, however, were reduced materially, to a total of only $5,172,000—47 per cent less than the total of $9,716,000 during 1930, and considerably increasing Germany's favorable balance of trade in rubber products.

The ability of German manufacturers to place rubber specialties in foreign markets at prices below those of most competitive goods was again responsible for their commanding position in this line, and in addition almost entirely accounts for the good showing made by the export industry.

Soft-rubber specialties—and included with them miscellaneous hard-rubber goods—have always been Germany's principal threat in the world rubber goods trade. The adaptability of German plants to the manufacture of a wide range of miscellaneous articles at low cost has furthered their success in these lines.

Value of German Rubber-Goods Exports

Item	1930	1931
Rubber specialties and impregnated fabrics	$12,821,998	$12,936,785
Hard rubber goods	2,380,317	2,089,260
Mechanical rubbed goods	2,746,327	1,582,447
Rubber footwear	2,405,511	2,251,917
Rubber tires	6,130,404	3,878,010
Total	$26,484,557	$22,638,419

Mechanical rubber goods felt the pinch of the depression to a greater extent than any of the other rubber manufactures, suffering a decline of 37 per cent in quantity and 42 per cent in value of exports during the year. Rubber hose accounts for the largest part of this group, 1,330,000 kilos in 1931, and rubber belting takes up the remainder, with 305,000 kilos. Rubber hose exports were down 35 per cent for the year, and the rubber belting figure dropped 46 per cent.

In viewing the foreign markets for German rubber goods, it is significant to note that the United Kingdom, a leading manufacturer of rubber products, is in several instances the largest outlet for German manufactures. In the important rubber specialties trade the United Kingdom was not only the best market, but increased its takings of German soft rubber specialties by 38 per cent, to a total of 3,357,000 kilos. The same is true of rubberized fabrics, galoshes and canvas rubber-soled shoes, while in rubber hose, bicycle tires, and hard rubber specialties the British market purchases important quantities of German goods.

The Netherlands is the second customer in importance to the German soft rubber specialties trade and in general for all rubber goods.

In the automobile casings trade several changes are in evidence with the reduced export figure for the year, most important of which are the losses sustained in the British Indian, Argentine, and Czechoslovak markets. The demand in the former country dropped from 40,000 to 16,000 casings; in Argentina, 78 per cent, to 6,447; and in Czechoslovakia, 26 per cent, to 21,000. In Argentina the establishment of a local manufacturing industry by two large American companies was, of course, responsible, while in the other two the critical position of the import market accounted for the losses.

(Other news of the industry will be found on Pages 157-162)

Use of TANK CARS in Handling Dry and Liquid Compounding Materials

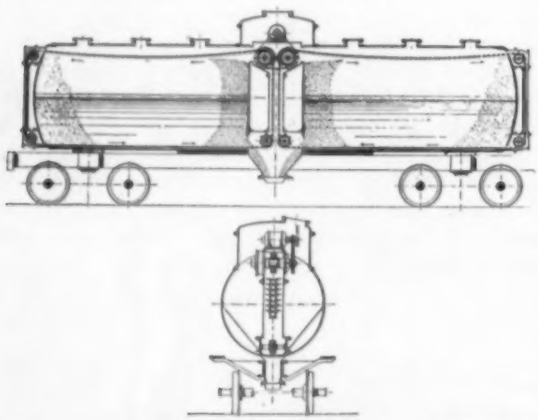
A Study of Two Methods of Tranporting Rubber Chemicals in Bulk — Dry Materials Are Now as Easily Handled in Tank Cars as Those in Liquid State — Some Liquified Compounding Materials, Heretofore Classed as Solids Can Be Also Effectively Handled by Tank Car

*I — Dry Materials**

A TANK CAR which handles granular commodities as conveniently and efficiently as standard tank cars now handle liquid commodities and which may effect substantial economies in the rubber industry, has just been introduced.

This new carrier, known as the Dry-Flo car, has been in trial service for more than a year carrying a variety of granular products. It has opened new vistas in transportation savings, such savings not being at the expense of the already harassed railroads, but due to elimination of intermediary handling. The car is unloaded without manual labor, being equipped with interior drag chains operated by a motor from a central dome.

Impressive economies are anticipated in the shipment of cement, lime, silica sands, arsenic, sulphur, soda ash, cleaning compounds, etc. Materials such as barytes, clays, chalk, colors, lithopone, sulphur, talc, whiting and zinc oxide, used in the manufacture of rubber, it is believed, may be economically shipped in the Dry-Flo car.



Diagrammatic sketch of the interior of new car. Cars are loaded through six openings at the top and unloaded through a single bottom outlet. Car is divided into two compartments with drag chain, operated by motor, keeping materials moving toward the outlet

*Data furnished by General American Tank Car Corp., Chicago and New York.

It has been discovered in these days that low cost of transportation alone will not necessarily keep business on our railroads. Convenience is just as essential, and the remarkable convenience of this new car is sufficient to bring back to the railroads many attractive movements of granular commodities in bulk.

The practice today has been to ship dry granular materials in packages, or if shipped in bulk, to handle them by the old-fashioned shovel and wheel-barrow methods. Certain exceptions exist such as the transportation of coal in hopper cars, and grain in box cars, but the package method with its old-fashioned type of handling is, in general, the one used today.

Such ladings are of sufficient volume to warrant the installation of equipment in the car to handle these commodities in bulk.

The new tank car is water tight and is provided with a single outlet at the bottom through which the bulk contents of the car are uniformly unloaded at a rate best adapted for subsequent handling by a simple conveying equipment.

Eliminates Several Handling Operations

The new carrier eliminates two or more handling operations, and because of these economies is expected to exert a far reaching influence in the marketing of those products. Savings as high as $2.00 a ton in shipping costs have been reported during the test period. These cars have a capacity of over sixty tons for heavy materials, and thus it can be seen that a saving could be effected of $120.00 on a single trip.

The operation of the new car is very simple. Drag chain conveyors are supplied which are drawn from each end towards the center of the car. The lading is pulled along with the chains and dropped from the chains into the discharge opening. The chains continue upward and back across the top of the car to the ends. Estimates place the life of the unloading mechanism at many times that of the car itself because of the low speed of operation and the somewhat infrequent use of the equipment compared with conventional conveying equipment which oftentimes runs twenty-four hours a day in industrial plants.

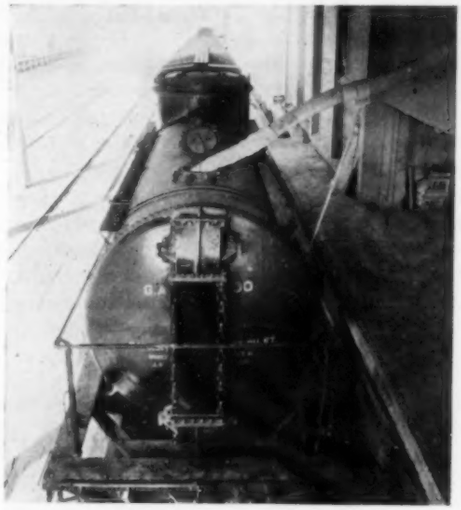
Dry commodities tend to pack and arch. They are of widely varying nature and weights, and therefore the car

had to be designed and perfected with an effective but very sturdy unloading mechanism, the operation and maintenance of which would be extremely simple and foolproof. The car entirely eliminates the dust nuisance, the losses which have been, up to now, present in the transportation of dry commodities, and the high cost of packaging.

Any railroad equipment which makes it more convenient for the shipper to use bulk shipments in railway cars rather than package shipments, will tend to keep the business on the railway lines at a profit to both the carriers and the shippers.

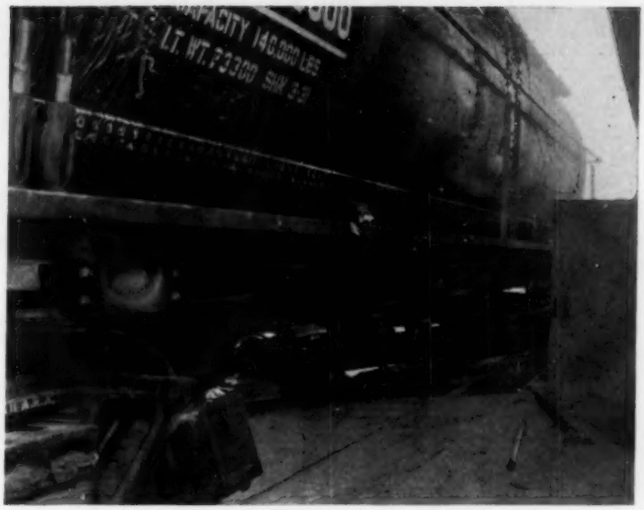
The final production of this carrier represents almost two years of research and road tests.

Among the many types of cars which are being used today none is considered more important and more far reaching in its effects than this present one.



Dry-Flo Car Being Loaded

As one of the results of this development, for example, a large contracting company has decided to use these cars rather than use motor trucks for transporting cement from the cement producing plants to their mixing plants.



Bottom of Dry-Flo Car Showing Conveyor and Motor Attached to Car's Bottom Outlet. Cargo is Carried Through This Conveyor to Receiving Bin

Another shipper who has been using hydrated lime in his manufacturing processes instead of the cheaper and more efficient quick lime, on account of the danger to workmen with the latter finds that since lime in a Dry-Flo car does not come in contact with human hands he can now substitute quick lime with a very impressive saving at the end of the year.

The large volume of dry commodities for which this car is readily adaptable makes its future comparable to that of the standard liquid carrier, whose numbers have grown from 37,000 in 1911, to approximately 175,000 in 1931. Undoubtedly, manufacturers of many dry compounding materials, now sold in bags or barrels to the rubber industry, will be interested in the economies of shipping in these new type cars.

*II—Caustic Soda in Liquid Form**

THE use of caustic soda in liquid form, rather than in solid or flake form, is comparatively new. Because of its importance as a chemical material in the rubber industry a discussion of the handling of liquid caustic soda would seem timely. A number of the larger rubber companies are reported to be using this material in liquid form in tank car quantities.

Some of the advantages of the liquid form may be summarized as follows:

1. Lower cost per 100 lbs. of NaOH delivered at plant where freight rate is below approximately 37c per 100 lbs.
2. Lower cost of handling caustic soda at plant. The handling of liquid involves simply the transferring of the liquor via pipe line from tank car to storage tank and again by pipe line from there to operation.
3. Cleaner and more efficient operation.
4. A greater factor of safety in operating which is natural to the convenience and efficiency with which liquid caustic soda can be handled.

*Data furnished by the Columbia Alkali Corporation, New York, N. Y.

The cold weather behavior of liquid caustic soda is no deterrent to the consumer who contemplates a change from the solid or flake forms. Large consumers today who are in that part of the country where severe weather is experienced during the winter, use the liquid form the year round without difficulty. Tank cars and handling equipment have been perfected to the point where cold weather handling is no longer an operating problem. It is only necessary that the operators follow carefully certain routine procedures during cold weather months. At other times of the year, the handling of liquid caustic is simplicity itself.

The essential equipment for handling liquid caustic soda in tank cars is (1) storage tanks, (2) pipe lines for liquor and for steam, (3) pumps, air pressure or some other method of forcing the liquor from tank cars to storage and from storage to operation.

The choice and arrangement of this equipment depends largely upon the method used for unloading tank cars, which in turn is dependent upon local conditions. Four practical unloading methods might be suggested:

Gravity Method

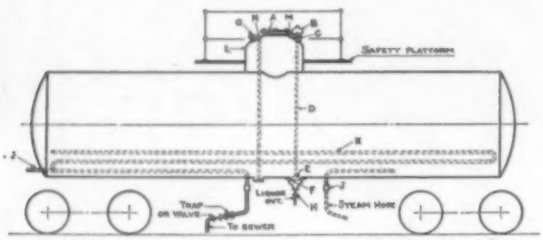
The liquid flows to storage under the pressure of its own weight. This is the simplest and most economical means of unloading, but applicable only when the storage tank is below the level of the tank on the car.

Pumping Method

The liquor is transferred to storage by means of a suitable pump, centrifugal type preferred. This method is applicable to most plant conditions and is generally the most satisfactory.

Air Pressure Method

The liquor is forced to storage tanks by means of air pressure applied over the surface of the liquor in the car through an inlet provided in the dome. This method is



TYPICAL TANK CAR

A—Dome cap.
B—Cap and handwheel for inside valve
C—Gland on valve stem.
D—Stem for inside plug valve.
E—Plug.
F—Seat.
G—Safety valve.
H—Discharge cock.
J—End connection for steam and condensate.
K—Steam coil.
L—Dome.
M—Plug for air connection.
N—Plug for top outlet connection.

economical, but used only where the lift is not too great and the installation of a pump not convenient. Shipper will not be responsible for accidents of any kind resulting from unloading by this method.

Steam Syphon Method

The liquor is caused to flow to storage by blowing a small amount of steam continuously into the discharge line. This method works satisfactorily for small lifts only and, of course, slight dilution will take place due to condensation of the steam used.

Having determined upon the most practical unloading method consistent with local conditions, the final choice of equipment is open to the following considerations:

Storage Tanks

Size and number of storage tanks necessarily is dependent upon the annual consumption of caustic soda, the time in transit of shipments, and the reserve supply required. Storage capacity should be provided for at least two to three weeks' supply, and in no case should a storage tank be less than 12,000 to 15,000 gallons capacity.

Storage tanks should be located inside a building wherever possible, and preferably at a point where the year round temperature is above 50° F. The best location is determined by its relationship to the point of consumption, available space and proximity to the siding where tank cars would be spotted. If tanks are located outside, they should be insulated to prevent difficulties in cold weather, but expensive insulation is not necessary or desirable. A two-inch layer of hair-felt, covered with weather paper, is quite satisfactory for this purpose and easily removed to make repairs.

The most satisfactory storage tanks for liquid caustic soda are usually the horizontal, cylindrical type, made of not less than 3/8" boiler plate steel of riveted and welded construction throughout. They should be provided with a manhole opening on top, an inlet and two outlets. One outlet should be flush with the bottom of the tank, to be used for cleaning purposes, and the other should extend up into the tank three or four inches, to be used for regular supply. All outside storage tanks should be provided with a heating coil consisting of at least 50 ft. of 2" pipe, as insurance against the possibility of crystallization taking place in cold weather. This heating coil is best located near the outlet of the tank.

Pipe Lines

All pipe lines, both to and from storage, should be either two-inch or three-inch, and fabricated of wrought iron or double strength steel. Flanged joints are preferable, with which a good grade of rubber gasket should be used. For connecting the tank car to the discharge line, a length of flexible steel hose is recommended. For connecting steam or air lines to the car, rubber hose capable of standing high pressure is suggested. These flexible hose connections obviate the necessity of spotting cars at exact points, and are much easier to work with than permanent connections.

Pipe lines should run inside of building wherever possible, and should be so laid that complete drainage can be effected following use. Caustic liquor should never be allowed to remain in pipe lines. Also, such lines should be readily accessible at all times. Where lines are exposed to cold weather, it is preferable to insulate them, although this precaution is not absolutely necessary.

Pumps

For transferring liquid caustic, both from tank car to storage and from storage to process use, centrifugal pumps are recommended. They should be located inside a building, if possible, or otherwise protected from the cold weather. A two-inch pump will be found entirely satisfactory, and can often be arranged to handle both the unloading and distribution from storage. A centrifugal pump of good cast iron construction of both casing and impellor works very satisfactorily.

Unloading Liquid Caustic Soda

Fifty per cent liquid caustic soda is entirely fluid at temperatures above 55° F. Below this temperature crystals form and deposit in the bottom and around the sides of a tank car. It is absolutely essential that the liquor be in a thoroughly fluid state before sampling or unloading. Hence, during the cold weather months, it is necessary to determine whether or not crystals are present before any move to unload the car is made. This is easily accomplished by removing the dome cover of the car and "feeling" the bottom and sides of the tank with a long rod inserted through the opening. The car can be sampled and unloaded immediately if no crystals are found present as is the case eight months out of the year. If crystals are present the temperature of the liquor must be raised until they dissolve. This is done by passing steam through coils located in the bottom of every car for that purpose.

The proper time to sample a tank car of liquid caustic is just prior to unloading. At this point, the mass is in an entirely fluid state and a representative sample is assured. A "drip" sample is sometimes taken during unloading by tapping the unloading line at some point, but we prefer the following method:

Lower slowly a seven-foot length of one-half inch nickel pipe, with both ends open, through the dome down to the bottom of the car. Then seal the top either with the thumb or a pet cock and withdraw the pipe. Release the liquor in the pipe into a container suspended from the top of the dome on the inside. The sample thus obtained is representative of the contents of the car. The operation is repeated until as large a sample as desired is obtained.

Improving Dealer Accounting Practices *in the* Rubber Industry

Results of an Investigation by the Policyholders Service Bureau, Metropolitan Life Insurance Company

IN an effort to collect practical information concerning accounting services to dealers, the Metropolitan Life Insurance Company made an investigation of the extent to which this type of service has been attempted by manufacturers and wholesalers, and of the methods employed in carrying out such programs. The results of this investigation as it applies to the rubber industry are presented in this article.

INVESTIGATIONS of commercial failures by credit organizations have shown incompetence and poor management to be among the predominating causes of retail trade mortality. The instability of earnings and the limited business life expectancy of its dealer organization is a serious problem and an important source of expense to many manufacturers. Accounting service to dealers has been inaugurated primarily to improve this condition. It is confidently expected by most companies which have taken this step that, with adequate accounting methods and more complete and up-to-date facts about their operations, dealers will be better equipped to meet the demands of present-day competitive business.

The extension of accounting services to dealers on a comprehensive scale is a relatively recent development and has been limited generally to those manufacturers and wholesalers whose products represent the principal or a relatively important part of the dealer's volume. In other words, manufacturers apparently question the justification for offering such specialized assistance to dealers who handle their products in direct competition with those of other manufacturers in the same field. The situation among tire dealers is such that usually only one manufacturer's line is carried. This tends to build up a closer relationship between producer and distributor than exists in many other fields. Under these circumstances it is not surprising to find the larger rubber companies in the forefront of those that have gone farthest in developing dealer accounting service.

Scope of Service

The extent to which manufacturers are undertaking to render accounting assistance to their dealers ranges all the way from furnishing occasional advice or assistance on specific problems to the development of a comprehensive, standardized system embodying a manual of accounting procedure with a complete set of accounting records and all supplementary forms necessary for its operation.

In most of the cases reviewed in the rubber industry, a rather extensive service is furnished. Many of the manufacturers provide a complete accounting system for their tire dealers. The description of the system as furnished in the accounting manual is made as simple and non-technical as possible so that no extensive knowledge of accounting principles is required to make the installation. Where outside assistance is required to put the plan in operation in individual instances, the suggestion is made that the dealer arrange for the services of a local accounting firm. There are some exceptions to this practice, however.

Program of the U. S. Rubber Company

The United States Rubber Company has recently perfected a simplified sales recording system and a uniform standard accounting system as an aid to tire dealers in establishing a control over their business operations. In addition it has also developed what is known as a "Better Business Program" as a means of assisting dealers along lines of business management. This program is presented in the form of a manual which decribes graphically successful retailing practices. Such subjects as gross profit, operating expense, net profit, mark-up, mark-down, inventory control, turnover, working capital and cash discounts, are discussed in language that can be readily understood by the average tire dealer. In this manual dealers are encouraged to submit monthly operating statements to the factory for review. With this information available, the factory executives are in a position to furnish counsel and advice to the dealer for building his business and increasing his profits.

The basis upon which the "Better Business Program" of the United States Rubber Company is rendered is described by an executive of this company as follows:

> "To assist in the installation of the simplified system, we suggested to the dealer that, where advisable, the services of a local accountant or bookkeeper be secured, since the mechanics of its operation are so simple.
>
> "From the General Office we have sent out a group of business analysts who, in cooperation with the dealer's accountant or bookkeeper, will install and service the Standard Accounting System. There will be no charge to the dealer for this assistance.
>
> "A statistical recapitulation of dealers' operating statements will be maintained at the General Office to determine standards of profitable operation for United States tire dealers. It can also be seen that a record of such vital facts will also be helpful in formulating and establishing our marketing policies."

The B. F. Goodrich Company makes effective use of the accounting manual in connection with its service to dealers.

This Manual of Accounts consists of five main subdivisions as follows:

1. Instructions as to How to Open the Books. This includes a designation of the books required, the initial facts that must be known, and a sample set of opening entries.
2. Use of the Journals. This section contains a brief description of the various books of original entry, together with the method of recording various types of business transactions. Sample pages are included in the manual for illustration.
3. The Ledgers. The method of operating the general ledger and subsidiary ledgers for accounts receivable and accounts payable is described. There is a suggested list of general ledger accounts, divided into five classifications, viz., Assets, Liabilities, Capital, Trading Accounts and Profit and Loss Accounts other than Trading.
4. Closing the Books. This includes a brief discussion of the procedure necessary in closing a set of books preparatory to making up a financial statement, including an example of the method of closing income and expense accounts to profit and loss.
5. Balance Sheet and Profit and Loss Statement. Specimen copies of a balance sheet and operating statement illustrate the method of making up these statements as described in this section.

The introduction of this system to Goodrich dealers is carried on through the sales organization. The installation of the system, however, is left entirely to the discretion of the dealer. In most cases there is no supervision of the installation on the part of the sales representative although questions covering the operation of the system may be referred to the auditor of the company at Akron, Ohio.

Use of Outside Facilities

An interesting point in connection with the dealer accounting system of the Goodyear Tire and Rubber Company is the method of installation followed. Arrangements have been made with a prominent firm of public accountants to assist dealers at their own expense in the installation and operation of the system. This firm maintains branch offices in many cities, and through cooperative arrangements with associated firms is able to provide accounting service for a great majority of dealers. Previous to this arrangement, the Goodyear Company made a number of installations with its own organization as a means of securing first hand experience and information on the application of the system.

Analysis of Operating Results

Many manufacturers emphasize the use of the accounting information for purposes of control through the development of operating statistics. Indeed, this utilization of figures is claimed to be one of the most important direct results of a successful dealer installation. This phase of a dealer accounting system as it has been developed by the Seiberling Rubber Company, is explained by an official of this company as follows:

> " . . . we run a dealer budget plan. This is a service offered to the dealer but not demanded of the dealer. We endeavor to get each dealer into our budget control work. We send to each dealer who enrolls a standard simplified form of accounting. We endeavor to get the dealers to send to this department each month a statement of their operations, showing their sales by departments, cost of merchandise, expenses by items and profit or loss. Then we make a study of each report and send back to each dealer an analysis of his operations, compared item by item with the average of all dealers reporting, and also compared item by item with the best results obtained by dealers.
>
> "We then comment as to where we feel the dealer may well concentrate his efforts in order to improve his position."

The "Better Business Program" of the United States Rubber Company, previously mentioned, presents through a series of charts the fundamental facts concerning the dealer's business that should be constantly kept in mind. For example, the importance of maintaining an adequate mark-up, the danger of indiscriminate price cutting and other factors which affect a satisfactory margin of profit are individually stressed. By following these principles intelligently, the dealer is able to build up operating statistics of important value through his accounting installation.

Securing Dealer Participation

The adoption by the dealer of a uniform accounting system is usually maintained on a voluntary basis. However, various methods are employed by the manufacturers for securing such participation. No special form of announcement is used by The Goodyear Tire and Rubber Company to advertise its dealer bookkeeping system, but this service has been given frequent publicity in weekly publications to the salesmen, in monthly publications to dealers, and in other miscellaneous literature. Letters announcing the plan have been sent also to certain dealers.

The United States Rubber Company contacts its dealers through its sales personnel as a means of securing their participation in its Better Business Program." This campaign is conducted on a nation-wide basis. The personal solicitation is supported by a descriptive broadside mailed to a selected list of dealers, stressing the fact that the "Better Business" system of records makes it easy for every dealer:

"1. To be a more intelligent business man,
2. To increase his business volume,
3. To increase his margin of profit,
4. To know at all times where his business stands."

The B. F. Goodrich Company, in connection with its accounting service to dealers, has prepared a booklet entitled "Helpful Information for Goodrich Dealers," which serves to introduce the uniform bookkeeping system that has been developed. This booklet, which is relatively simple in form, discusses various phases of the financial side of the retail tire business under the following five headings:

1. Financial Fitness—This is concerned with the subjects of cash requirements, credit extension and collections, and the general principles of effective financial management.
2. Discussion of Establishment—This section discusses the subjects of store location, equipment, maintenance and arrangement, personnel management and other general operating problems.
3. Application—This is largely inspirational in character covering such topics as "Think Through to Conclusions," "Cooperating With Others" and "Will to Win."
4. Method and Chart for Rating the Business—This presents a form for the dealer to use in analyz-

(*Concluded on page* 155)

New York Rubber Group, A.C.S., Hears Papers on Variety of Subjects

Over 100 Member Hold First Meeting of the Year — Dinner And Entertainment Precede Presentation of Papers — Holt Gives Discouraging Statistics — Kratz Talks on Latex

THE first meeting of the year of the New York Group, A.C.S., was held on the evening of Wednesday, May 18, at the Club rooms of the Building Trades Employers' Association, 2 Park Avenue, New York City. The meeting was attended by 100 members and guests with John S. Coe, of Naugatuck Chemical Company, presiding as chairman.

Immediately following an excellent dinner, Walter Grote, chairman of the entertainment committee, introduced the humorist of the evening William Kelgard, whose flow of after-dinner stories was thoroughly enjoyed. After a brief intermission to give an opportunity to clear away the tables the regular meeting was started but not before Mr. Grote performed one of his baffling card tricks.

Chairman Coe announced that tentative plans had been laid for holding two more meetings during the year, one probably October 5 and the other in December, as usual. Details of the programs would be sent to members well in advance of the meetings. He next introduced E. G. Holt, chief of the Rubber Division of the Department of Commerce, Washington, D. C., who spoke informally on "Affairs in Washington," with special emphasis on the proposed rubber tax plans and the latest statistics bearing on the industry.

G. D. Kratz, consulting engineer and well-known rubber technologist followed with a talk on the "Trend in the Use of Latex." He, in turn, was followed by H. N. Norris, of the engineering staff of the Western Electric Company, who read a paper on the "Applications of Rubber in the Plating Industry."

The evening ended with a talk by A. M. Ragsdale, of the Carrier Engineering Corporation, on "Air Conditioning in Railway Cars, Homes, Stores, etc." Mr. Ragsdale's talk was profusely illustrated with slides.

Brief abstracts of the talks delivered before the New York Group follow:

Rubber Affairs in Washington and Late Rubber Statistics

E. G. Holt

TAX plans on rubber are still in an uncertain stage and it is not predictable just what Congress will do in the matter but some form of manufacturers sales tax on rubber products may be expected. In reviewing the statistical position of crude rubber since the first of the current year it was pointed out that production is still exceeding consumption by about 5 per cent in spite of low prices and the cessation of tapping over a large area. It is predicted that world production will reach 807,000 tons for 1932, with world consumption of around 640,000 tons. In the international trade in rubber products, markets are being hampered by all manner of restriction measures in the form of tariffs, quotas, exchange and lost purchasing power. Rubber belting is the only item to show improvement. Over 40 per cent of all belting exported today is rubber belting. Rubber footwear has been particularly hard hit in foreign markets. Our exports have dropped from over 10,000,000 pairs in 1929 to probably less than 1,500,000 in 1932. The United States has yielded first place in footwear exports to Japan and now actually receiving more cheap Japanese rubber footwear into this country than we are exporting.

Trends in the Use of Latex

G. D. Kratz

LATEX should be considered in the light of a new material in its applications to fields outside the rubber goods manufacturing industry. Its applications in other industries, such as the cordage, textile, water-proofing and other industries is growing constantly. The surface for new developments along these lines has merely been scratched. The important point in introducing latex to a new use is the proper solution for the specific problem. The simplicity in the matter of the application of latex and its economies were also stressed. The example was cited of the cordage industry which has been endeavoring to obtain waterproof properties for certain classes of twine. The introduction of latex in the same dyeing and impregnating solution heretofore used, brought the desired result. Future application of latex in commercial uses, entirely aside from rubber goods, opens up wide opportunities.

A word of warning was added that due to the comparatively easy method of manufacture with less costly equipment when latex is used, there may be an influx of smaller rubber factories which can get started at a very small investment, but whose products may do considerable harm to the industry in general.

Application of Rubber in the Plating Industry

H. N. Norris

WHEREVER acid is used there may be an opportunity for some application of rubber in connection with the attendant equipment. This has proved to be true in the plating industry where rubber covered racks have been particularly effective and economical. The author reviewed the electro-plating process with the use of racks and illustrated with samples of the various styles of racks, the advantages of each method of rubber coating, i. e., the anode process, hard rubber, dipping and soft rubber coatings. The economies in point of labor, time and maintenance of the racks were stressed. Rubber covered racks have become the accepted type of rack for electro plating.

Air Conditioning in Railway Cars, Homes, Stores, Etc.

A. M. Ragsdale

REVIEWED the history of air conditioning on railway cars. Motion of the train, dust and dirt, etc., brought up new problems. Baltimore and Ohio the first line to air condition their cars. Reviewed the differences between electric refrigeration, ice, and the steam ejector principle. The author favors the latter principle for most instances in railway work. Steam brought direct from the locomotive. All the author's remarks were illustrated by slides. Other air conditioning units were shown, such as used effectively for small meeting halls, homes, stores, offices, etc.

Dealers' Stocks of TIRES Drop Since Last Official Survey

Semi Annual Department of Commerce Figure Shows Average Dealer Only Holding 66.2 Casings As Compared With 78.4 Held Last Year — Fewer Tire Dealers Send In Returns

THE regular semi-annual survey of tire stocks in hands of dealers, conducted since 1924 by the Rubber Division of the Department of Commerce, shows the accompanying comparable statistics, as of April 1, for stocks held by independent retailers in 1932 as against 1931. The number of reports received from dealers having stocks of casings was 4,678 less than in April, 1931. The average number of automobile casings per dealer was 66.2 on April 1, 1932, compared with 78.4 a year previous.

Dealers' Stocks of Tires

	April 1, 1931			*April* 1, 1932		
	Number	*Dealers Reporting*	*Average per Dealer*	*Number*	*Dealers Reporting*	*Average per Dealer*
Total casings	2,249,927	28,707	78.4	1,590,935	24,029	66.2
High pressure	330,878	21,150	15.6	202,452	16,711	12.1
Inner tubes	3,071,686	28,846	106.5	2,193,848	24,188	90.7
Solids	28,193	1,296	21.8	14,589	818	17.8

High pressure casings, including both passenger car and truck sizes, which accounted for 14.7 per cent of total stocks reported April 1, 1931, amounted to only 12.7 per cent of the total reported this year.

An analysis by volume groups has been prepared of the reports from dealers having stocks of casings. A greater percentage of the reports fell into the groups of less than 25 casings in the present survey, compared with 1931.

Dealers by Volume of Stock

	April 1, 1932		
	Number of Dealers	*Per Cent of Total Dealers*	*Number of Casings*
Less than 10	4,951	20.61	24,388
10-24	6,640	27.63	106,520
25-49	5,338	22.21	187,053
50-99	3,779	15.73	257,674
100-199	1,913	7.96	258,623
200-299	572	2.38	136,424
300-399	275	1.15	92,993
400-999	428	1.78	250,080
1,000 and Over	133	0.55	277,180
Total	24,029	100.00	1,590,935

The tendency of dealers to concentrate on a single make of tires is shown clearly in the following percentage table, covering April 1 surveys from 1925 to 1932, inclusive. Less than 5 per cent of the dealers handle more than two makes now, as compared with 20.5 per cent in 1925; the percentage concentrating efforts on a single make has increased from 43.2 per cent to 71.5 per cent.

Number of Makes Handled by Dealers

(*Percentages of Total*)

No. of Makes	1929	1930	1931	1932
One	58.5	68.3	70.0	71.5
Two	30.7	24.9	24.0	23.6
Three	7.3	4.7	4.1	3.6
Four, Five and Six	3.5	2.1	1.9	1.3
Totals	100.0	100.0	100.0	100.0

In the survey of April 1, 1931, stocks of tires held by leading mass distributors were reported for the first time. That report covered stocks held by (a) the two principal mail-order houses and their chains of stores; (b) two supply companies merchandising special brand tires (one principally through its own stores, and the other principally through retail outlets of oil companies), and also a third independent chain system; and by (c) three tire manufacturing companies through chain-store systems operated or controlled by the companies. Under (c) reports included from two companies covered only stores reporting stocks of over 500 casings on April 1, 1931.

Method of Calculation

The report of the October 1931 and April 1932 surveys cover similarly complete returns from identically the same distributors under (a) and (b), but an attempt was made to secure more complete information under (c), which covers reports, regardless of size of stocks, received from the three tire company controlled chains included April 1931, and in addition covers returns from stores operated by five other tire manufacturing companies, and stocks reported by a few stores operated by an oil distributing company. Complete figures of stocks held in retail outlets described under (c) were not received from all companies; if complete returns had been received from the remaining companies, and if the average stock per store had been the same as for the stores which did report for the same companies, total October 1 stocks shown below would have been increased by fully 400,000 casings and by an equal number of inner tubes. Similarly, the April 1, 1932, stocks would have been increased by about 360,000 casings and an equal number of inner tubes.

Stocks of Mass Distributors

With the above explanation as a basis, the following table is given showing the stocks reported by mass distributors April 1 and October 1, 1931, and April 1, 1932.

	April 1, 1931	*October* 1, 1931	*April* 1, 1932
Total casings	1,402,115	1,987,284	1,592,271
Total inner tubes	1,547,586	1,847,440	1,775,194
Total solids, etc.	854	3,350	4,509
High pressure casings	47,000*	229,438**	167,395

*Incomplete figure, item not reported by several firms.
**Including estimate for one firm.

Mass distributors' stocks of casings, including those not reported, estimated at 1,800,000, are approximately the same as in April, 1931, but 500,000 less than in October, 1931. Stocks held by independent dealers, estimated at 4,650,000 April 1, 1932, were about 450,000 more than in October, 1931, but about 840,000 less than for April, 1931; these estimates assume that the number of active independent dealers is approximately 70,000.

Dealer Accounting Practices

(*Continued from page* 152)

ing and rating his own business from a management standpoint.

5. More Retail Sales—More Retail Profits—This summarizes the program for Goodrich dealers for the current year.

Other factors have contributed to the development of the dealer accounting service. In some cases the need for better accounting records in connection with the computation of Federal and State taxes has been cited as having influenced interest in this direction. In other cases, it is stated that, through improved accounting methods, the dealer is able to secure more satisfactory bank credit, because he can present a more complete statement of operations. The benefits accruing through the assistance to dealers in improving accounting methods are still largely potential, inasmuch as this work is still relatively in its preliminary stages in most of the cases studied.

Firestone Tire for Tractors

THE Firestone Tire and Rubber Company have announced a major development in tire construction—in their new low-pressure tire for four-wheel drive tractors in switching railroad cars. The tire has been developed specifically for this service after considerable experimentation and it has now been specified as original equipment on the Massey-Harris Company GP tractor for switching yard use.

It is claimed that with this new tire the four-wheel drive tractor does the work of a switching engine, moving freight cars and locomotives around warehouses, repair shops and switch yards. It is adapted to varied and unusual conditions in railroad yards, freight yards, material yards and stations—and in addition to switching uses, it can be used on any other work a tractor can do.

The tires are 48 x 12 size, of six ply construction, operated at only 15 pounds air pressure. The low pressure and large contact area make it possible for these tires to cross ordinary railroad tracks without any undue bumping or jarring of the machine. They also provide sufficient traction to move a long string of freight cars. Use of tractors so equipped offers quite a possibility and it will be possible for a tractor to run over the tracks or around trains to get at a particular car which is to be moved without switching an entire string of cars that might be in the way as in the case an ordinary engine were used. They may also be economical, in small cities or small yards, where only a few cars are to be moved each day.

The operation of these tractors with the new Firestone tires has been inspected by railroad men and given high praise.

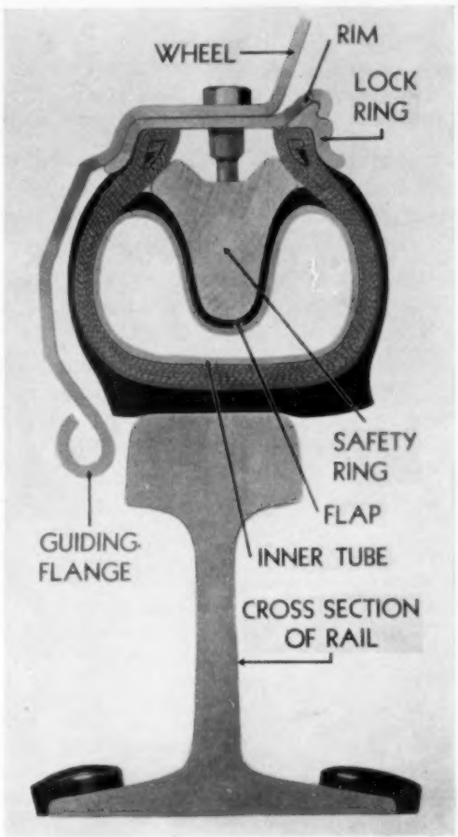
Color Dispersion

MUCH improved covering power may be obtained from pigment colors if they are mixed into a thick paste in a dilute soap water solution before milling into the rubber. No trouble need be anticipated from the water used as it is all evaporated during the milling operation. This method produces appreciable economies in color costs and eliminates the hazard of dry colors flying about the mill room.—R. R. Olin Laboratories, Akron, Ohio.

Goodyear Rail-Car Tire

AS REPORTED in a recent issue of THE RUBBER AGE the Goodyear Tire and Rubber Company has received the rights to manufacture in the United States, the new Michelin rail-car tire, which has been already tried out with success in Europe and at home. The accompanying illustration presents a cross-section of the new tire.

The tire, carrying 85 pounds of air pressure and constructed similar to an automobile tire, is equipped with a demountable rim and wheel which has a steel guiding flange to prevent the tire from leaving the track. A safety ring made of wood is bolted to the center of the rim and the tire is shaped to fit around it. Purpose of the safety ring is to prevent the tire from running flat in case of puncture.



The coach with a punctured tire can proceed under slower speed to the next station, where a quick change to another tire can be made. However, possibilities of flat rail tires are less likely than on ordinary highways because steel rails are nearly always smooth and free from nails, tacks or glass.

On track curves the quarter-inch clearance between the guiding flange and the rail is taken up when the coach takes the curve.

There is an insulated rubber pad between the parts that make up the lower section of the guiding flange which absorbs any slight noises at the point of contact with the flange and rail.

The rail tire has a load capacity of 1,650 pounds per tire and the new coaches constructed of stainless steel have a weight of 11,000 pounds, as compared with as high as 150,000 pounds for the large Pullman cars.

Pneumatic rail tires will, in all probability, find their immediate usefulness on railway coaches used on short runs where the traffic is too light to justify the expense of locomotive and coaches.

EDITORIAL COMMENT

A Rubber Tax Proposal

THE question whether rubber is one form or another is to be taxed under the pending Federal revenue bill, now before Congress, is still uncertain. A fortnight ago the Senate Finance Committee reported favorably on a straight import tax of 5 cents per pound on crude rubber. The market flurried. Manufacturers and traders went into a huddle and now the plan is to offer an amendment in the form of a manufacturer's sales tax, based on a proposed rate of 3 cents per pound per tire and 5 cents per pound for inner tubes. A more ridiculous method of tax levying can hardly be conceived.

If crude rubber is to be ultimately taxed, it would seem that the import duty idea, as an expedient measure, would be far preferable. On the other hand if such a tax is levied, in order to equalize the inventory values of those companies holding large stocks and those smaller concerns who have only light stocks on hand, some provision should be made to tax all such stocks as and when they are put into manufacture. In other words, a consumption tax on present stocks on hand should also be enacted, under which these present stocks would be made to yield a part of the desired revenue. Otherwise, with stocks now on hand totaling possibly a year's supply, the import tax feature would be frustrated to an extent of 350,000 tons of rubber now lying in storage and in hands of manufacturers.

The larger rubber companies with stocks on hand have not opposed the 5 cent import tax idea presumably because they can profit handsomely in the adjustment of their inventories. The opposition to the tax has come largely from the smaller company with no sizable stocks on hand or on contract. The import tax, supplemented by the consumption tax on present stocks would remove the objection of the small factory and place all the rubber industry on an equal basis as far as inventory values are concerned.

But the salient point in any discussion on rubber taxation is the question of the amount of revenue to be derived in this serious hour of Governmental need from the two proposed methods, i.e., a manufacturer's sales tax on tires and tubes or an import duty of 5 cents per pound on crude rubber, supplemented by a consumption tax as suggested above, applicable to present stocks on hand.

The accompanying table has been prepared to show the comparative revenue to be expected from the two methods based on the latest official import figures and best estimates of the production for the ensuing year. In estimating the volume of imports of crude rubber for 1932, the very conservative figure of only one half of 1931 imports has been taken.

The table speaks for itself. If the maximum revenue is desired, with an equitable levy on the whole industry, the import tax combined with the consumption tax provision, would seem to be the form of taxation to be adopted.

Potential Revenue From Tax On Automobile Tires and Tubes
vs.
Import And Consumption Tax On Crude Rubber

Tires and Tubes Tax

Tires sold 1931— 50,060,700 @ 23.57 lbs.* @ 3c lb.	$35,397,920.00
Tubes sold 1931— 50,021,470 @ 2.5 lbs.‡ @ 5c lb.	6,252,683.00
	$41,650,603.00
Tires sold in 1st quarter 1932— 8,760,000 @ 23.57 lbs.* @ 3c lb.	$ 6,194,196.00
Tubes sold in 1st quarter 1932— 8,918,000 @ 2.5 lbs.‡ @ 5c lb.	1,114,750.00
Estimated Revenue for First Quarter	$ 7,308,946.00
Estimated Revenue for Full Year	$29,235,784.00

*Average tire weight. ‡Average tube weight.

Crude Rubber Import and Consumption Tax
(Based on rate of 5 cents per pound)

Stock on hand in U. S.* — 343,000 tons @ $112 ton	$38,416,000.00
Stock afloat* — 50,000 tons @ $112 ton	5,600,000.00
	$44,076,000.00
Imports for period May 1, 1932—May 1, 1933 assumed at ½ of 1931: 247,000 tons @ $112 per ton	$27,664,000.00
Total Estimated Revenue for year ending May 1, 1933	$71,740,000.00

*As of May 1, 1932.

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Representatives in all the rubber centers of the United States, Canada, England, France, Germany and the Middle East.

The Rubber Industry's CURRENT NEWS

Financial—Personals—New Rubber Products—
Building Operations—Manufacturing—Exports

BUYERS NOT LIABLE FOR RUBBER DUTY TAX

In connection with the possible imposition of an import duty on crude rubber and in view of the questions raised by members of the Rubber Exchange of New York, as to whether the buyer or seller would be liable for such tax, the Exchange has issued the following statement to clear up the situation:

"The board of governors is in receipt of inquiries as to whether or not the buyer, under exchange contracts, may be required to assume or pay any import duty or import tax which may be levied upon the importation of rubber into the United States.

"This question is purely a question of law, and accordingly the board has sought and obtained advice of counsel. That advice is to the effect that under the forms of contract of this exchange and under its by-laws, rules and regulations, there is no basis for requiring the buyer to assume or pay the amount of any import duty or import tax which the United States may levy upon the importation of rubber, unless, and to the extent that the Act of Congress, as passed, specifically imposes such duty or tax upon the buyer."

The question has been raised following the action of the Senate Finance Committee in inserting a duty of 5 cents a pound on all crude rubber imports in the revenue bill. This provision of the bill was subsequently dropped, however, and a form of manufacturers sales tax has been substituted.

Thermoid Shows Loss

The Thermoid Company, Trenton, N. J., and wholly owned subsidiaries report for quarter ended March 31, 1932, net loss of $106,685 after depreciation, interest, etc., comparing with net loss of $101,679 in first quarter of 1931. Current assets as of March 31, last, including $506,286 cash and government bonds, amounted to $1,919,512 and current liabilities were $247,430. This compares with cash of $603,718, current assets of $2,115,847 and current liabilities of $333,369 on December 31, 1931.

Dayton to Increase Output

A considerable step-up in production of tires and tubes is expected at the Dayton Rubber Manufacturing Company, Dayton, O., as a consequence of the addition of 600 new dealer outlets to the concern's field organization.

Announcement of the new dealers was made recently by John A. MacMillan, president and general manager of the company.

I. R. I. Fellowships

Announcement was recently made of the election of E. R. Bridgwater, of E. I. Dupont de Nemours and Company, and H. E. Elden, Dunlop Tire and Rubber Company, to Fellowships in the Institution of the Rubber Industry.

The Institution elects very few to this honor during any one year. Among the American and Canadian rubber chemists who have been so honored are: John M. Bierer, C. R. Boggs, R. P. Dinsmore, W. C. Geer, Dr. A. A. Somerville, Dr. David Spence, Prof. G. Stafford Whitby, W. B. Wiegand and Dr. H. A. Winkelmann.

Foster Rubber Reorganizes

The stockholders of the Foster Rubber Company, Boston, Mass., manufacturers of the Catspaw Cushion Heel, held a special meeting on May 6, at Boston, for the purpose of increasing the directors from three to five and elected Benjamin H. Pratt as president and director and Herbert J. Pratt was made the other member of the board which now consists of Benjamin H. Pratt, Donald B. Kingsbury, Herman L. Beal, Herbert J. Pratt and Margaret E. Kiley.

Benjamin H. Pratt, the new president, is a brother of the late Daniel S. Pratt, who spent his entire life in the rubber business, and who for so many years was widely known throughout the United States as Dan Pratt, "The Cat's Paw Man."

The change in the personnel of the Foster Rubber Company means that the Pratt family is getting behind the new organization in a vigorous and aggressive way. For many years the Catspaw heel was well-known in the trade and the management back of the new organization states that they intend to bring it back to the position it occupied in former times.

Flower City May Move

Negotiations are reported in progress at Fostoria, O., for the establishment there of the Flower City Rubber Company, now located at Monroe, Mich. A site has been approved by officials of the company but the proposition is contingent upon a loan from Fostoria business men, to take care of the necessary moving expenses and to start operations. Bank failures in Michigan, which have tied up the funds of the rubber concern, are given as the reason for seeking a new location.

Products of the company include rubber gloves, stair treads and balloons.

GOODYEAR EXTENDS ITS AIRSHIP FLEET ACTIVITIES

Announcement was made from Akron recently by President P. W. Litchfield that the Goodyear Tire & Rubber Co., builders of the Navy airship, the U. S. S. Akron, had leased the southwest corner of Pal-Waukee Airport on the Milwaukee highway from Chicago and would erect a hangar or dock there for the use of one of the company's non-rigid airships.

The airship dock will be 160 feet long by 62 feet wide by 65 feet high and will be built by the Austin Company, construction to start at once. The building is expected to be ready for occupancy by the middle of June.

The airship *Puritan*, which returned to Akron this week after operating at Miami, Florida all winter, is scheduled to be flown to Chicago and to operate from the new dock as soon as the building is finished.

The *Puritan*, which will carry six passengers, is 140 feet long, has a diameter of 39 feet, and is inflated with 112,000 cubic feet of non-inflammable helium gas, helium being used exclusively by the Goodyear fleet.

The Goodyear company owns or leases similar docks at Akron, Los Angeles, Gadsden, Alabama and at New York City, using these as bases for the operations of its six ships, the *Defender, Puritan, Volunteer, Reliance, Pilgrim*, and its newest ship, the *Resolute*, operating in New York.

The Goodyear fleet of airships is the only privately-owned assembly of airships in the world. The fleet was started in 1925 with the building of the *Pilgrim*, other ships being added from time to time.

Goodyear Appeals Decision

The Goodyear Tire and Rubber Company has filed an appeal in the Circuit Court of Appeals of Cincinnati, O., against the decree awarding the Overman Cushion Tire Company and others, an injunction and accounting for alleged patent infringement. The injunction was recently granted in the Federal court at Cleveland.

Visit Goodrich Plant

Twenty officers and sixty enlisted men of the U. S. Army Quartermaster's Corps Motor Transport School, Camp Holabird, Md., visited the B. F. Goodrich Company May 20 on their annual motor trip through the middle-west. They came to Akron from Youngstown, according to advice from Col. Edgar S. Stayer, camp commandant. Major J. H. Johnson was in command of the group.

GENERAL ABANDONS PLAN TO BUY FISK

William O'Neil, president of the General Tire and Rubber Company, announced on May 9, that any negotiations looking toward the purchase of the Fisk Rubber Company by General were definitely off. He intimated, according to press despatches, that overtures on the part of Fisk had been made either by the reorganization committee or by representatives of the receiver at Fisk, Charles A. Dana, but negotiations failed because of an inability to agree on price.

The Fisk-General Tire rumor is one of a series that has excited comment since affairs of the Chicopee Falls concern were thrust into the limelight with appointment of receivers over two years ago.

Goodrich Veteran Retires

Edward Christopher "Ed" Wilhelm, oldest employee of the B. F. Goodrich Company in point of service and one of the best known men in the processing field of the rubber industry has retired after 43 years of continuous service with the Goodrich company. "Ed" as he is known to thousands, has been transferred to the service annuity payroll of the company.

Starting in life as a construction laborer, Wilhelm had his first contact with the rubber industry in 1887 as operator of a tubing machine at the Goodrich plant. After working 16 months he left to go into other fields, but returned in 1889 as a calender helper. He has been in the employ of the Goodrich company ever since, and has completed a total of 45 years of service.

Specializing in calendering, Wilhelm is recognized as one of the outstanding experts in this field. He calendered the rubber compounds for most of the first automobile tires.

Promoted to calender supervisor, in charge of Mill One and Mill Two calender rooms, Wilhelm played a large part in the improvements of calendering methods made possible by new machines and introduction of the "weftless" calender. Since 1927, Wilhelm has been the expert on calendering in the technical department of the Goodrich company processing division.

Rubber Exports Drop

Shipments of crude rubber to the United States during April, from British Malaya, amounted to 21,537 tons, according to cable advices to the Rubber Exchange of New York, Inc., as compared with 24,254 tons during March and with 29,021 tons during April, 1931, a decline of 11% and 25.8%, respectively.

Smaller rubber shipments also were recorded last month to the United Kingdom, Continental countries and to Japan. Those to British possessions and "other countries" increased.

McClaren Steps Up Output

With production now practically at capacity, the McClaren Rubber Company of Charlotte, N. C., now has approximately 400 persons on its pay roll, according to a report from the company's general offices.

Symposium on Rubber

The American Society for Testing Materials, 1315 Spruce Street, Philadelphia, Pa., is publishing in book form the papers constituting the symposium on rubber, held at the Cleveland regional meeting of the Society, in March. It is bound in blue cloth, 160 pp. 6 by 9 inches, and is profusely illustrated. The book will be available June 15, at $1.75 per copy, postage prepaid.

Rim Committee Meets

The yearbook committee of the Tire and Rim Association met May 5 at the Mayflower Hotel, Akron, Ohio, under the chairmanship of C. E. Bonnett of Cleveland, association secretary, to prepare its annual yearbook on standardization of tires and rims.

The purpose of the session, Mr. Bonnett said, was to prepare in permanent form the decision of the association on tire and rim sizes at its annual meeting. Representatives of all principal rubber companies attended.

Cabot Rebuilds After Fire

Reconstruction is progressing rapidly at the Pampa carbon black plant of the Godfrey L. Cabot, Inc., which was partially destroyed last month by fire. The press room and part of the packing house will be rebuilt with improved equipment.

The fire was the most severe in the history of the carbon black industry and caused a complete shutdown of this large plant.

PLANTATION CO. ENTERS MANUFACTURING BUSINESS

An interesting angle to the rubber situation as it affects British investors is taken by the Roeburne Finance and Investment Company, a British rubber plantation company, with large estates in Johore.

In a circular to shareholders the directors state: "When the raw material has to be sold at an uneconomic price, and at the same time manufactured articles can be sold at a profit, it is the opinion of your board that your company should put itself in a position to earn profits by entering the manufacturing side of the business."

The directors are therefore asking the approval of shareholders to acquire control of the Bath Rubber Mills, Ltd., which they state is a well-established and successful undertaking engaged in the manufacture of rubber flooring, tennis balls and other rubber articles.

The directors state that they have already secured important contracts for supplying rubber flooring and also have a valuable contract with one of the largest chain stores in Great Britain, calling for the supply of 350,000 tennis balls per annum.

The reconstruction of the company will be carried out in connection with this acquisition, and its finances placed on a sound basis. The directors are convinced that when these proposals are adopted, and a protective tariff granted, the company's future prospects should be assured.

OFFER HOME GARDENS TO HELP EMPLOYES

In a further effort to assist their employes during the present depression, the larger companies in the Akron district are opening up additional acreage for allotment to their workers for home gardens.

Firestone Tire & Rubber Company announced the opening of a 48-acre tract east of the Firestone public golf course which will provide room for 500 gardens in addition to the 175 south of Wilbeth Rd. at Girard St.

B. F. Goodrich Company is working out an extensive program, A. C. Sprague, who is in charge of this work announces. Definite designation of plots will be made shortly.

At Goodyear a 20-acre tract on company property at Massillon Road between Weston Road and Seiberling St. has been prepared. S. S. Wrobleski of the employment division is in charge of the program.

In connection with each of these projects the companies will provide Standard Red Cross seed sets to the gardeners.

Pharis Working Full Time

The Pharis Tire and Rubber Company, Columbus, O., is reported to be working at capacity, with a full force, to fill orders already on the company's books. It is expected that this activity will continue for several months. Over 500 persons are being employed.

Berzen, Inc., Moves

Nat E. Berzen, Inc., dealers in scrap rubber, have announced the removal of their offices from 11 West 42nd Street to 551 Fifth Avenue, New York City. Nat E. Berzen, president of the concern, is chairman of the scrap rubber division of the National Association of Waste Material Dealers.

Gives Up N. Y. Office

The Philadelphia Rubber Works Company, of Akron, O., has announced to the trade the closing on April 30, of their New York office, located at 52 Vanderbilt Avenue.

Rubber Stock Quotations

	Last Price		—1932—	
	May 19	May 5	High	Low
Aetna	1⅝	1¾	3	1⅝
American Hard Rubber	—	—	—	—
Faultless	19	19	25	12
Firestone	12	12	15	12
do. 6% pfd.	49	48¾	59½	48¾
Fisk	¼	⅛	⅜	⅛
do. 1st pfd.	—	—	⅞	¼
General	45	45	42¾	49¾
do. pfd.	60	60	—	—
Goodrich	—	3¼	5⅝	3¼
do. pfd.	—	9½	17	9½
Goodyear	9½	10	18	9⅛
do. 1st. pfd.	32	34	59½	32
India	1½	3	7	1½
Kelly-Springfield	1	1	2⅝	1
do. 6% pfd.	—	—	39⅞	16½
Lee	—	2	2⅞	2
Mohawk	1⅛	1⅝	2½	1
do. pfd.	20	20	—	—
Norwalk	—	1	—	—
Pirelli	—	—	30⅞	26⅞
Raybestos-Manhattan	5¾	—	11½	4⅞
Seiberling	1½	1⅞	4½	1½
do. pfd.	15	15	22	15
Thermoid	1¼	1¼	3	1
U. S. Rubber	3	3⅛	5⅝	3
do. pfd.	5	—	10⅞	5

Names in the News

JAMES W. SCHADE, director of research of the B. F. Goodrich Company, spoke before a joint Akron-Cleveland Society of Automotive Engineers meeting, held in Akron, May 9, on the subject of "New Applications of Rubber from a Research Standpoint."

ED CHRISTFIELD, general manager of the Johnson City and Binghamton factories of the Endicott-Johnson Corporation, donned a pair of overalls the other day and plowed the first row in the workers' gardens of Johnson City, a new project of the company, whereby employees are allotted plots for garden purposes, the ground being plowed, furrowed and fertilized free of charge. Over 200 applicants have already been assigned plots under the scheme.

R. T. GRIFFITHS, vice-president and general manager of the Miller Rubber Products Company, Inc., and JAMES TAYLOR, manager of the Miller toy and ball division returned to Akron, April 29, from Chicago after attending the annual Chicago Toy Fair.

S. W. CAYWOOD, vice-president and sales manager of the International B. F. Goodrich Company, recently returned from an extensive trip to Latin America in the interests of his company. He was away from Akron over four months and made an intensive study of trade conditions. During his tour he travelled over 12,000 miles by airplane, being in the air more than 100 hours.

GEORGE L. HURSET, consulting mechanical engineer, of San Francisco, is now handling the sale of the Farrel-Sykes line of gears, speed reducers, gear drives and gear cutting machines in the San Francisco territory. This equipment is manufactured by the Farrel-Birmingham Company, Inc., 344 Vulcan Street, Buffalo, New York. Mr. Hurst has been a representative of the Farrel-Birmingham Company, of Ansonia, Conn., and one of its predecessor units, the Birmingham Iron Foundry, of Derby, Conn., for a number of years. He maintains offices at 785 Market Street, San Francisco.

J. R. BROWN has been appointed sales representative for the Farrel-Birmingham Company, Inc., Ansonia, Conn., to handle the sale of the Rafter Patent Press-Brake and other types of mechanical and hydraulic metal working presses in the middle west territory. His headquarters are at the company's branch office, 2710 First Central Trust Building, Akron, Ohio.

SIR WALROND SINCLAIR, managing director of British Goodrich Rubber Company, Ltd., arrived in New York City the first week in May for a series of business conferences with Goodrich officials. Sir Walrond was an Akron visitor on several occasions last year and was recently knighted for his distinguished war service in the British Army.

J. F. O'SHAUGHNESSY, general manager of the tire department of the United States Rubber Company, has been appointed vice-president in charge of sales of the company's entire group of products.

Mr. O'Shaughnessy, located in Detroit the last three years, will continue as general manager of the tire plant there, but from now on he will divide his time between his Detroit and New York offices. In his new capacity he will direct the merchandising of products of the footwear, clothing, and mechanical goods departments, in addition to tires and tubes.

J. F. O'SHAUGHNESSY

In the fall of 1929 Mr. O'Shaughnessy went to Detroit as assistant to the general manager of the tire department. He was promoted to general manager early in 1930. Prior to his connection with the United States Rubber Company, in 1929, he was with the sales division of the Du Pont Viscoloid Company.

Mr. O'Shaughnessy received his early merchandising experience in department stores in Columbus, Ohio and Boston, where he went shortly after his graduation from Ohio State University. He is a native of Columbus, Ohio.

HENRY WACKER, aeronautic department, B. F. Goodrich Company, will attend the annual meeting of The National Advisory Committee for Aeronautics at Langley Field, Va., May 23,27.

AL ROTH, B. F. Goodrich Company ad vertising man, returned to the home offices May 9 from Dallas, Texas, where he had spent two months as district advertising manager in the absence of NORMAN KEELING. Keeling on the tour of sales conferences with the Goodrich sales drama "Play Without a Name" has returned to Dallas.

JOSEPH B. HANAN, staff superintendent of the mechanical goods division, B. F. Goodrich Company, had his annual highly unusual pleasure recently when the chemistry class of Rocky River High School, Cleveland, which is taught by his brother, B. P. Hanan, made their yearly trip through the Goodrich plants.

NORMAN H. KEELING, district advertising manager in Dallas, Tex., for the B. F. Goodrich Company, returned to Dallas the last of April following a three months' conference trip with the Goodrich sales organization throughout the country. Mr. Keeling played one of the leading roles in the Goodrich sales drama, "The Play Without a Name." A. H. ROTH, Goodrich advertising department representative, who substituted for Keeling in Dallas, is expected to return to Akron soon.

CHARLES SCOTT was retired on pension by the Philadelphia Rubber Works Company, division of the B. F. Goodrich Company on May 1 after more than 20 years of service. He is 70 years of age.

HENRY SCHIPPEL, B. F. Goodrich Company tire division technical engineer, attended a conference at Detroit recently of tire and wheel manufacturing representatives to study low pressure tire and wheel design.

HENRY G. ZIMMERMAN, traffic manager of the B. F. Goodrich Company, returned to his office, May 2, after a three months' illness.

DR. WILLIAM C. GEER of Ithaca, N. Y., formerly vice president and director of research for The B. F. Goodrich Company arrived in Akron May 9 and was a visitor at the Goodrich plant. He has been associated with Goodrich in the development of aircraft "de-icers."

A. T. MATTHEWS, general manager of Martha Mills, Inc., B. F. Goodrich Company's mill in Silvertown, Ga., accompanied by C. G. THOMPSON, manager of the cotton and waste department of the southern subsidiary, recently visited Akron for a series of inter-plant conferences. They returned to Atlanta by airplane.

DR. H. L. FISHER, of the General Laboratories of the United States Rubber Company, spoke at Wilmington, Del., on May 18, before the Delaware Section of the American Chemical Society, on the subject of "Modern Rubber Chemistry."

STUART T. EDGERTON, United States Rubber Company, New York City, heads a committee which will meet in Detroit next month to consider suggested specifications for corrugated shipping containers.

Rubber News Around the World

DUNLOP PASSES DIVIDEND BUT HAS FAIR YEAR

Although the profits of the Dunlop Rubber Company for 1931 were remarkably well maintained, having regard to the condition of international trade, the directors are not advising the payment of any ordinary dividend, compared with 6 per cent for 1930.

The total profit is returned at £1,181,000 ($5,905,000), against £1,250,000 ($6,250,000) in 1930. The net profit, after providing for dividend on the guaranteed preference shares in subsidiary concerns and other charges, comes to £480,000 ($2,400,000), a decrease of £61,000 ($305,000). But the amount necessary to reserve for taxation is very much larger, namely, £374,000 ($1,870,000), against £100,000 ($500,000). As a result, even to pay the full year's dividend on the preference shares, which requires £281,000 ($1,405,000), the amount carried forward has had to be reduced by £177,000 ($885,000). In other words, the preference dividend was not earned by a margin of that amount.

Special Reserves Increased

The special reserve held against investments in, and advances to, subsidiary concerns has been increased from £1,000,000 to £2,000,000 ($10,000,000) by a transfer from the general reserve, and £156,000 exchange losses due to Britain's retirement from the gold standard has also been charged to the general reserve, which is accordingly reduced to £1,216,000 ($6,080,000). On paper there is an increase in Dunlop's overseas investments amounting to £2,500,000 ($12,500,000), owing to the appreciation of foreign currencies over sterling, but no credit for this amount has been taken into account. The firm maintains a strong liquid position, current assets amounting to £5,656,000 ($28,280,000), of which £2,820,000 ($14,100,000) is represented by cash and British Government and other securities. Including the preference dividends, the current liabilities amount to only £1,296,000 ($6,480,000).

"The company has made provision for its proportion of the losses incurred during 1931 by subsidiary and associated companies," says the report. "In addition there has been charged against profits the preference dividends in respect to Dunlop Plantations and Dunlop Rubber Co. (India), which have been paid by the parent under its guarantees. The amounts so paid are repayable out of any future profits of those companies, but no credit for such repayments has been taken in the accounts.

"The manufacturing companies in France, Germany, and Japan are in a healthy position. The Dunlop Perdriau Company of Australia is similarly satisfactory. The unsatisfactory position on the North American continent as a whole, and the tire industry in particular is well known, and great attention has been given to the circumstances of investments in the Dunlop companies in the United States and Canada. With the present depressed state of industry these companies suffer, along with others, and it is impossible to say when the tide of prosperity will turn.

"The cotton mill has been well employed, its financial position is strong and the cost of production has been still further reduced. The rubber plantations have continued to increase in efficiency and the cost per pound of the rubber produced is still showing a reduction. The estates' valuation in the books is a low one.

"We believe that, in the absence of unforeseen circumstances, the current year's results should show an improvement over those of 1931."

Dunlop Tests New Tire

A notable type of tire, containing three times as much air as the ordinary tire, with a road contact surface increased in almost the same proportion, has just been tested by the Dunlop Rubber Company, Fort Dunlop. So far the results of the experiments indicate that it will be of service for special purposes rather than to motor vehicle users generally.

The outstanding advantage of the new tire is improved comfort and freedom from shock to the car or passengers when traveling over rough ground, as, on account of their softness, the tires are able to absorb very large obstacles. Moreover, there is greatly improved traction, especially over soft surfaces. The use of these tires would, however, mean a greater consumption of power and they would be more costly to produce owing to the greater amount of material used in their manufacture. Further tests are, however, to be undertaken.

BEHARREL DOUBTFUL ON FUTURE OF "DOUGHNUTS"

Sir George Beharrell, managing director of the Dunlop Rubber Company, Fort Dunlop, is skeptical regarding the introduction of "doughnut" tires in the United Kingdom.

"We have," he admits, "made available a high capacity low-pressure tire having a cross-sectional width of 15 inches; but results in this field are likely to be restricted in England because of a regulation which limits the overall width of the public service type of vehicle to 7 feet 6 inches—a handicap from which other important countries do not suffer.

New Dunlop Directors

G. W. Huggett and J. I. Simpson, both of Canadian Industries, Ltd., were added to the board of directors of Dunlop Tire & Rubber Goods Company on April 22. The board reorganization results from establishment of more intimate management relationship with Canadian Industries, Ltd., which holds an important financial interest in Dunlop. Canadian Industries, Ltd., will, in future, take a more active part in Dunlop management and is represented by W. R. Walton, Jr., as active manager. J. Westren will remain as vice-president in an advisory capacity.

CANADIAN GOODYEAR PRODUCES 3RD LINE TIRE

Goodyear Tire and Rubber Company of Canada has been producing for some time at the rate of about 3,500 tires a day, four days a week, officials state. This is more than the market has been taking, but the company has been trying to keep as many employed as possible. If the May market develops as expected, the above rate of output probably can be maintained. Tire sales during the year to date have not been up to expectations, bad weather in some important sections of the country having militated against normal motor traffic. Other adverse influences have been lower car registrations, the more difficult credit situation and slower collections.

Goodyear Tire of Canada introduced a third line of tires this month at attractive prices, with the idea of meeting the shrunken public purse. In the first and second lines of tires advances of 3 per cent in the prices occurred following the increase in taxation in the new Dominion budget.

The mechanical rubber tire business of the company has stood up relatively well, wide diversity of products helping to maintain sales in this department.

Rubber Trust Suffers Loss

The Rubber Plantations Investment Trust announces net profits for 1931 as only £23,537 ($117,685), which compares with £157,894 ($789,470) in 1930. There is, of course, as was the case last year, no possibility of a dividend on the trust's £2,250,000 ($11,250,000) of issued capital. A sum of £100,626 was brought in, and after placing £21,662 to taxation account there remains £102,501 to be carried forward.

There has been a further depreciation in the trust's investments. The value of these investments (its own properties are not included) was, on December 31 last, £1,235,910, against the sum of £2,278,146 at which they stand in the balance-sheet. Against this heavy adverse difference the company still possesses a general reserve of £658,000.

Canadian Trade Survey

A review of the situation by the Rubber Association of Canada declares that the Canadian rubber business today shows about the dollar sales-volume position that it did between eight and nine years ago. The last previous decline followed the prosperous year of 1920 and the industry did not reach a similar dollar sales volume until 1925. There has been a difference, however, in the present slump. After 1921 there was an increase each year, but since 1928 there have been successive declines in both domestic and export dollar-sales.

In 1930 the total was $10,000,000 down, or 18 per cent below domestic sales in 1929 and a further decline of $4,250,000 or 20 per cent, in 1931. Export business fell off even more sharply. There was a drop in 1930 of $7,750,000, or 27 per cent, while in 1931 the decline was $9,454,000 or 46 per cent.

BRITISH TIRE EXPORTS INCREASE, FOOTWEAR DROP

Exports of automobile casings from the United Kingdom to foreign countries during the first quarter of 1932 numbered 287,213 as compared to 235,632 for the same period of 1931.

During the first quarter of 1932 the United Kingdom exported 476,616 pairs of rubber boots and shoes and canvas rubber-soled shoes valued at £44,408 as compared to 512,508 pairs valued at £53,914 in the first quarter of 1931.

Canadian Exports

Official reports of the exports of Canadian rubber goods during the first quarter of 1932 list shipments of pneumatic casings to the number of 97,300 as compared with 224,898 during the corresponding period of 1931. Exports of inner tubes also showed a similar drastic decline, the shipments totaling for the first quarter of the year only 64,890 as compared with 185,876 in 1931.

Canadian exports of rubber boots and shoes to foreign markets during the first quarter of 1932 numbered 221,610 pairs valued at $273,055 and canvas rubber-soled footwear was shipped to the amount of 338,006 pairs valued at $196,088. This compares with 235,950 pairs of rubber boots and shoes valued at $385,729 and 1,356,874 pairs of canvas rubber-soled shoes valued at $880,020 shipped from Canada in the first quarter of 1931.

Canadian rubber belting exports totaled 172,233 pounds valued at $56,897, during the first quarter of 1932, as compared to 201,582 pounds valued at $64,554 in the same period of 1931. Canada exported $18,418 worth of rubber hose in the first quarter of 1932 as compared to $40,858 in 1931.

Barr Insures Employes

One hundred and fifty-nine employees of the Barr Rubber Products Company, of Sandusky, O., are eligible to receive insurance in amounts ranging from $500 to $2,500, through the acquisition by that organization of a group life insurance policy.

The Prudential Insurance Company of America issued the policy, which involves a total of $121,000. The premium payments will be shared by the employees and the employing company, the policy being of the contributory type.

Fewer Accidents at Goodyear

Announcement was recently made by the safety department of the Goodyear Tire and Rubber Company of the safety report for the month of April showing a reduction of 54 per cent in lost time accidents as compared with April of 1931. The lost time accidents for April this year totalled 18.

"The Story of Gastex"

An interesting story of the history and development of Gastex, the product of the General Atlas Carbon Company, was contained in the May, 1932 issue of *Doherty News*. The company is maintaining an exhibit of products made from Gastex, on the first floor of 60 Wall Street Tower, New York City.

New Rubber Goods

Rubber-Handled Screw Driver

Every screw driver user will be interested in the new "Supergrip" recently introduced by the Forsberg Manufacturing Company, Bridgeport, Connecticut.

They have three outstanding points: the hexagon guard to prevent fingers slipping on to blade in electrical work; rubber handle fluted and knurled to assure positive

grip; special constructed wings on blade in handle to prevent blade turning or pulling out.

They are furnished in display boxes of one dozen or in leather wall kits of six conveient sizes.

Valve Caps in Bulk

Vulcanizers and repair shops will be interested to know of the new medium weight Schrader valve cap, manufactured by A. Schrader's Son, Inc., Brooklyn, N. Y. Built particularly for service work, the cap

is bulk packed both in 100 and 250 lots. It carries the Schrader guarantee, viz.—airtight up to 250 lbs. pressure, and is attractively low priced.

Rubber-Tired Coaster Skates

A new rubber-tired coaster skate, of firm steel construction throughout, measuring 16 inches over all, is being marketed by the Steel Materials Company, Detroit, Mich., and was on exhibit at the recent Toy Fairs in New York and Chicago. It has an adjustable clamp with toe guard to fit any foot and has three rubber-tired double disc steel wheels. Several different color combinations make for the further attractiveness of this article.

Electric Heating Pad

The Seamless Rubber Company, New Haven, Conn., has announced a new electric heating pad, which they call "Electro-Sheet." Electro-Sheet is a solid sheet of high quality rubber, 9 x 13 inches, with hexagonal corners and slightly over ⅛ inch thick. The color is a glossy red and the surface is attractively embossed. At one end it tapers down to what is apparently a solid rubber cord, ⅜ inch in diameter and 13 inches long, leading to a bakelite switch. At the other end of the switch is a 6½-foot length of Rayon-covered "heater-cord," terminating in a bakelite plug for insertion in any ordinary light-socket or walloutlet. In the pad itself, and the rubber cord leading

to the switch there are no electrical or mechanical features visible. It is apparently just a thin, flexible sheet of high-grade rubber.

Moulded and vulcanized wholly inside the pad are two thermostats and an electrical heating-unit. The heating-unit consists of two metallic circuits—one for "low" heat, and for "medium" heat, and the two operating in "series-parallel" for the "high" or "starting" heat.

The temperature is controlled by the two thermostats according to the position of the switch. By a mere flick of the thumb the user can set the switch, in a second, to "high," "medium," "low" and "off."

New Dayton Tire

A new low pressure tire 7.50 by 15 is being marketed by the Dayton Rubber Manufcaturing Company, Dayton, O., under the brand name "Super Balloon." The design of the tire is neither a full circle nor pear-shaped in cross section, but is a modification of these two designs. The new tire is interchangeable on the following makes: Ford 1929-30-31; Chevrolet 1930-31-32, and the 1931 models of Plymouth, Chrysler, DeSoto, Dodge and Pontiac.

Osborn Adds to Line

According to Franklin G. Smith, president of the Osborn Manufacturing Company, Cleveland, Ohio, the company has made an addition to its range of manufacturing activities, through the inclusion of a complete line of overhead materials handling equipment, to be known as Osborn Tramrail Systems. Osborn Tramrail Systems have been designed to meet practically all conditions encountered in the installation of overhead materials handling equipment. The equipment is built for capacities up to three tons.

Goodrich Fleet Returns

The B. F. Goodrich Company Silver Fleet test cars rolled into Akron from Florida April 30 after spending five months in the south, and completing a total of 550,000 miles of test car travel since December 1. Practically all of this was in Florida.

INQUIRIES FROM READERS

(*Address replies to the Editor,* THE RUBBER AGE, *250 West 57th Street, New York City, N. Y., mentioning inquiry number.*)

Sponge Rubber Sheets

An inquirer requests the names of manufacturers of sponge rubber sheets about 1/16" in thickness, with and without cloth backing. Inquiry No. 52532.

Hollow Rubber Balls

Names wanted of concerns who can manufacture flexible rubber balls, 12 inches in diameter with opening of 7 inches in diameter, the balls to hold another ball 12 inches in diameter. Inquiry 52532A.

Sponge Rubber Rind Shavers

Rubber manufacturer desires names of makers of equipment to cut or shave off rind from sponge rubber slabs. Inquiry No. 52532B.

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LATE MARKET PRICES

RUBBER—COTTONS AND FABRICS—CHEMICALS

NEW YORK, MAY 19, 1932

Crude Rubber

THE crude rubber market flurried early in the past fortnight, when it seemed probable that the import tax of 5 cents per pound would receive favorable consideration, but reacted strongly to a new record low when the tax plan was substituted by a manufacturers excise tax on tires and tubes. While tire production climbed a little in March, the lower rubber consumption figure for April would indicate that manufacturers have not advanced their schedules.

Trading in the market has been very light. Stocks in manufacturers hands are reported to be fairly high and there is little buying interest to increase present holdings, even at present attractive price levels. The market has lately maintained considerable steadiness with spot at a trifle under 3 cents.

Prices quoted on the New York outside market, as of May 20, follow:

Plantations—

Ribbed Smoked Sheets—			
Spot-May	.02⅞	@	.02 15/16
July-Sept.	—	@	.03
First Latex, crepe spot	—	@	.04
Amber Crepe, No. 2	—	@	.02⅞
Amber Crepe, No. 3	—	@	.02⅞
Amber Crepe, No. 4	—	@	.02⅝
Brown Crepe, Clean thin	—	@	.02¾
Brown Crepe, rolled	—	@	.02½

Paras—

Liquid Latex, per gal.	.70	@	.75
Up-river, fine	—	@	.05½
Up-river, coarse	Nominal		
Acre Bolivian, fine	—	@	.06
Caucho Ball, Upper	.02½	@	.03

Centrals—

Central scrap	.04	@	—
Esmeraldas	.04	@	—

Balata—

Block, Ciudad	—	@	.18

LONDON MARKET

Standard Ribbed Smoked Sheets—Buyers

May	1⅞	@	1 15/16d
June	1⅞	@	1 15/16d
July-Sept.	1 15/16	@	2d

SINGAPORE MARKET

Standard Ribbed Smoked Sheets—Sellers

Spot	1½	@	1⅝d

Reclaimed Rubber

There has been no change reported in price levels for reclaimed rubber during the last fortnight, with the situation remaining as before. There has been small reduction in production and one large plant has entirely ceased operations, but nevertheless, reclaimed still seems to hold its own, even at prices above standard grades of crude. Latest prices for standard reclaim grades are as follows:

High Tensile

Super-Reclaim Black	lb.	.05	@	.05¼
High Tensile Red	lb.	.05	@	.05¼

Shoe

Unwashed	lb.	.05	@	.05¼
Washed	lb.	.05¾	@	.06

Tube

No. 1 (Floating)	lb.	—	@	.06½
No. 2 (Compounded)	lb.	.04¾	@	.05

Tires

Black	lb.	.03¾	@	.04
Black, selected tires	lb.	.04	@	.04¼
Dark Gray		.05	@	.05¼
Light Gray	lb.	.05½	@	.06
White	lb.	.05½	@	.05¾
Truck, Heavy Gravity	lb.	.05	@	.05¼
Truck, Light Gravity	lb.	.05¼	@	.05½

Miscellaneous

Mechanical blends	lb.	.03	@	.03½

Scrap Rubber

A slight decrease in demand on the part of reclaimers has been reported during the last two weeks. Scrap prices are at such low levels that it has become increasingly difficult to accumulate stocks. Lower freight rates to certain collection centers has helped the situation but as a whole the scrap market remains extremely dull. Late prices follow:

(Prices to Consumer)

Auto tire peelings	ton	18.00	@	20.00
Mixed auto	ton	7.50	@	8.75
Bicycle tires	ton	5.00	@	6.00
Clean solid truck tires	ton	24.00	@	26.50
Boots and shoes	ton	15.00	@	17.50
Arctics, untrimmed	ton	10.00	@	12.50
Inner tubes, No. 1	lb.	.02⅝	@	.02⅞
Inner tubes, No. 2, compounded	lb.	.01⅜	@	.01½
Inner Tubes, Red	cwt.	1.40	@	1.50
Air Brake Hose	ton	9.00	@	10.00
Rubber Hose	ton	8.50	@	9.00

Cotton

COTTON has registered another drop during the past two weeks but the market has steadied around 5.70 for middling uplands. Hope of favorable tax action is influencing the market, which remains dull with mills practically dictating prices. In spite of good weather and favorable crop reports the market has drifted into a state of dullness.

High, low and closing prices on the New York Cotton Exchange, as of May 20, are reported below:

	High	Low	Close May 20	Close May 4
May	5.73	5.66	5.73	5.54
July	5.81	5.72	5.78	5.63
Oct.	6.05	5.96	6.02	5.81

Tire Fabrics

Low raw cotton levels has not materially affected the price range on tire fabrics over the last fortnight. Total lack of interest in outside mills has kept the market stagnant. Small lot purchases only have been reported at small price concessions. Late prices on standard grades follow:

(Prices Net at the Mill)

CORD

Peeler, carded, 23/4/3	lb.	.24	@	.24¼
Peeler, carded, 23/5/3	lb.	.23	@	.23¼
Peeler, carded, 13/3/3	lb.	.20	@	.20¼
Peeler, carded, 15/3/3	lb.	.21	@	.21¼
Egyptian, carded, 23/5/3	lb.	.35	@	.35½
Egyptian, combed, 23/5/3	lb.	.40	@	.40½

CHAFERS

Carded, American, 8 oz.	lb.	.18	@	.19
Carded, American, 10 oz.	lb.	.18	@	.19
Carded, American, 12 oz.	lb.	.18	@	.19
Carded, American, 14 oz.	lb.	.17	@	.18

LENO BREAKER

Carded, American, 8¼ oz.	lb.	.18	@	.22
Carded, American, 10¼ oz.	lb.	.18	@	.22

SQUARE WOVEN

Carded, American, 17¼ oz. 23-11 ply	lb.	.23	@	.24
Carded, American, 17¼ oz. 10 ply	lb.	.17	@	.17½

Sheetings

The demand for sheeting constructions has remained dull and no changes in price range has been reported over the fortnight. Late prices follow:

40 inch, 2.50 yard	yd.	.05¼	@	.05⅝
40 inch, 2.85 yard	yd.	.04⅝	@	.04¾
40-inch, 3.15-yard	yd.	.03⅝	@	.03½
40-inch, 3.60-yard	yd.	—	@	.04⅝
40-inch, 3.75-yard	yd.	—	@	.04¼
40-inch, 4.25-yard	yd.	—	@	.03¾

Ducks

The market for ducks has remained quiet and no change in prices has been noted during the last two weeks. Late quotations follow:

Enameling	lb.	.16¾	@	.17¾
Belting and Hose	lb.	.18	@	.18½
Single filling	lb.	.07¼	@	.07½
Double filling	lb.	.09¼	@	.09½

Closing Prices on Rubber Exchange of New York, Inc.

No. 1 Standard Contract of 10 Tons

FROM MAY 5 TO MAY 19, 1932

Date	Spot	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sales
May 5	3.25	3.17	3.22	3.27	3.32	3.38	3.43	3.47	3.52	3.57	3.62	3.67	3.77	97
6	3.75	3.90	3.95	4.00	4.03	4.05	4.14	4.23	4.33	4.39	4.45	4.51	4.57	203
7	4.25	4.15	4.17	4.20	4.27	4.35	4.38	4.44	4.50	4.55	4.60	4.65	4.75	286
9	3.80	3.40	3.48	3.55	3.61	3.67	3.71	3.75	3.80	3.75	3.85	3.95	4.02	261
10	3.85	3.95	3.95	3.95	3.97	4.00	4.02	4.03	4.05	4.10	4.15	4.21	4.28	169
11	3.45	3.40	3.40	3.40	3.44	3.47	3.50	3.57	3.65	3.73	3.77	3.82	3.88	88
12	2.93	2.88	2.91	2.95	3.02	3.10	3.17	3.23	3.30	3.36	3.42	3.48	3.58	176
13	2.90	2.88	2.90	2.93	2.97	3.02	3.09	3.15	3.21	3.26	3.31	3.37	3.47	35
14	2.93	2.80	2.84	2.89	2.95	3.02	3.08	3.14	3.20	3.25	3.30	3.55	3.45	7
16	2.93	2.80	2.85	2.90	2.97	3.05	3.10	3.17	3.23	3.28	3.33	3.38	3.48	4
17	2.95	2.89	2.91	2.93	2.99	3.05	3.12	3.18	3.25	3.32	3.38	3.45	3.55	10
18	3.00	2.93	2.96	2.99	3.05	3.12	3.18	3.24	3.30	3.35	3.40	3.45	3.55	11
19	2.95	2.93	2.94	2.95	3.01	3.07	3.13	3.19	3.25	3.30	3.25	3.40	3.50	28

CHEMICALS

PRACTICALLY no change in the manufacturing situation has been noted during the last fortnight. Movement of compounding materials has been slow and little improvement can be expected for some time. The industry is being kept on edge until Congress decides whether crude rubber or tires and tubes should be taxed. No changes in chemical prices are reported.

ACCELERATORS

Organic			
A-1	lb.	.24 @	.27
A-5-10	lb.	.33 @	.36
A-7	lb.	.55 @	.59
A-11	lb.	.62 @	.66
A-16	lb.	.57 @	.61
A-19	lb.	.58 @	.62
A-20	lb.	.64 @	.68
A-32	lb.	.80 @	.95
Aldehyde ammonia, crystals	lb.	.65 @	.70
Altax	lb.		
Captax	lb		
Cryiene	lb.	.55 @	.65
paste	lb.	.45 @	.55
Di-Ortho-Tolyguanidine	lb.	.42 @	.44½
Diphenylguanidine	lb.	.30 @	.32½
Ethylidene aniline	lb.	.45 @	.47½
Formaldehyde aniline	lb.	.37½@	.40
Heptene	lb.	.40 @	—
Hexamethylene-tetramine	lb.	.58½@	.61
Lithex	lb.	.18 @	.20
Methylenedianiline	lb.	.37½@	.40
Monex	lb.	3.25 @	--
Oxynone	lb.	.58 @	.60
Phenex	lb.	.50 @	.55
R & H 40	lb.	.40 @	.41
R & H 50	lb.	.40 @	.41
R & H 397	lb.	.75 @	.76
R-2	lb.	1.95 @	2.15
Safex	lb.	1.20 @	1.25
SPDX	lb.	.75 @	—
Super-Sulphur No. 1	lb.		
No. 2	lb.		
Tensilac, No. 39	lb.	.40 @	.42½
Tensilac, No. 41	lb.	.50 @	.52½
Thermic F	lb.	.50 @	.55
Thiocarbanilid, drums	lb.	.20 @	.22
TMTT	lb.	3.00 @	3.25
Trimene	lb.	.75 @	—
base	lb.	1.20 @	—
Triphenylguanidine	lb.	.58 @	.60
Tuads	lb.		
Ureka	lb.	.75 @	1.00
Vulcanex	lb.		
Vulcone	lb.		
Vulcanol	lb.		
Z-88-P	lb.	.50 @	.60
Zimate	lb.		
Inorganic			
Lead, sublimed blue	lb.	.08¼@	—
Lead, white	lb.	.08½@	.08¾
Litharge, domestic	lb.	.06¼@	.07
Magnesia, calcined,			
light	per 100 lb.	5.35 @	5.45
heavy	per 100 lb.	3.65 @	3.75

COLORS

Blacks (See Compounding Materials)			
Blues			
Prussian	lb.	.35 @	.36
Ultramarine	lb.	.06 @	.32
Browns			
Sienna, Italian	lb.	.05½@	.12½
Umber, Turkey	lb.	.04½@	.07
Greens			
Chrome, light	lb.	.30 @	.32
medium	lb.	.31 @	.33
dark	lb.	.34 @	.36
Chromium Oxide, bbl.	lb.	.34½@	.35½
Reds			
Antimony			
crimson, 15/17	lb.	.40 @	.44
sulfur, free	lb.	.56 @	.66
golden, 15/17 F.S.	lb.	.20 @	.25
Indian English	lb.	.08 @	.11
Domestic (Maroon)	lb.	.11 @	—
Red oxide, pure	lb.	.10 @	.12
Rub-Er-Red, f.o.b.Easton	lb.	.08¾@	—
Whites			
Lithopone, Albalith	lb.	.04½@	.04¾
Lithopone, Azolith	lb.	.04½@	.04¾
Titanium oxide	lb.	.21 @	—
Titanox B	lb.	.06½@	.07
Titanox C	lb.	.06½@	.07
Zinc Oxide—American Process			
American Azo:			
ZZZ (lead free)	lb.	.05¾@	.06
ZZ (leaded)	lb.	.05½@	.05¾
Horsehead Lead Free Brand:			
Selected	lb.	.05¾@	.06
Special	lb.	.05¾@	.06
XX Red	lb.	.05¾@	.06
XX	lb.	.05¾@	.06
XX Green	lb.	.05¾@	.06
Leaded Brand, Standard	lb.	.05½@	.05¾
Sterling	lb.	.05½@	.05¾
Superior	lb.	.05½@	.05¾
Lehigh	lb.	.05¼@	.05½
U. S. P., bbls.	lb.	— @	.12¾
Kadox, black label	lb.	.09⅝@	.09⅞
Blue label	lb.	.08⅝@	.08⅞
Red label	lb.	.07¼@	.07½
Cryptone, No. 19	lb.	.06½@	.06¾
Cryptone CB, No. 21	lb.	.06½@	.06¾
XX Zinc Sulphide, bbls.	lb.	— @	.13
St. Joe, black label	lb.	.05¾@	.06
green label	lb.	.05¾@	.06
red label	lb.	.05¾@	.06
Zinc Oxide—French Process			
Anaconda, lead free	lb.	.05¾@	.06
Anaconda, selected lead free	lb.	.06¼@	.06½
Florence White seal, bbls.	lb.	— @	.10⅞
Green seal	lb.	.09⅝@	.09⅞
Red seal	lb.	.08⅝@	.08⅞
Yellows			
Chrome	lb.	.16½@	.17
Ocher, domestic	lb.	.01⅝@	.02

BLACKS

Arrow "Aerfloted"			
c.l. f.o.b. works, bags	lb.	.03 @	—
c.l. f.o.b. work, cases	lb.	.04½@	—
less c.l. f.o.b. works	lb.	.05½@	.07
Bone, powdered	lb.	.05½@	.12½
Carbon, compressed	lb.	.03 @	.07
uncompressed	lb.	.03 @	.07
"Certified," Cabot			
c.l. f.o.b. works, bags	lb.	.03 @	—
c.l. f.o.b. works, cases	lb.	.04½@	—
less c.l. f.o.b. works	lb.	.05½@	.07
"Disperso" f.o.b. La.	lb.	.031 @	.071
f.o.b. Texas	lb.	.03 @	.07
Drop, bbls.	lb.	.05½@	.14
"Excello," compressed	lb.	.04 @	.08
"Fumonex"	lb.	.02½@	.06
"Gastex"	lb.	.02½@	.06
Lampblack	lb.	.07 @	.10
"Micronex"			
c.l. f.o.b. works, bags	lb.	.03 @	—
c.l. f.o.b. works, cases	lb.	.04½@	—
less c.l. f.o.b. works	lb.	.05½@	.07
"Supreme"	lb.	.03 @	.07
Thermatomic—"P 33"	lb.	—	—
"Thermax"	lb.	—	—
United, "Dixie" and "Kosmos"			
c.l. f.o.b. works, bags	lb.	.03 @	—
c.l. f.o.b. works, cases	lb.	.04½@	—
less c.l. f.o.b. works	lb.	.05½@	.07
"Velvetex"	lb.	.02 @	.05

COMPOUNDING MATERIALS

Aluminum Flake	ton	21.25	@24.50
Ammonia carbonate, lump	lb.	.10½@	.12
Asbestine	ton	13.40	@14.00
Barium carbonate	ton	56.50	@57.00
Barium Dust	lb.	.05 @	.06
Barytes southern off-color	ton	12.00	@18.00
Western prime white	ton	33.00 @	—
Basofor	lb.	.04½@	—
Bentonite	lb.	.02 @	.03
Blanc fixe dry f.o.b. works	ton	75.00	@90.00
Carrara filler	lb.	.01¾@	.02
Catalpo (fact.)	lb.	.02 @	—
Chalk, precipitated			
Suprex white, extra lt.	ton	60.00	@70.00
heavy	ton	45.00	@55.00
Clay, Kaolin, domestic	ton	8.00	@ 9.00
Aerfloted, Suprex	ton	6.50	@ 8.00
Congaree	ton	9.00	@ —
Dark Blue Ridge	ton		
Dixie	ton		
Langford	ton		
Lexington	ton	10.00	@22.00
Par	ton		
Tensulite		15.00 @	—
Glues, extra white	lb.	.20 @	.25
medium white	lb.	.16 @	.20
Kalite No. 1	ton	30.00	@60.00
Kalite No. 3	ton	40.00	@70.00
Magnesia, carbonate	lb.	.08¾@	.11
Mica	lb.	.04½@	—
Rotten Stone (powdered)	lb.	.02 @	.05
Soapstone, powdered	ton	15.00	@22.00
Starch, powdered	cwt.	— @	2.57
Talc, domestic	ton	12.00	@15.00
Pyrax A	ton		
Whiting, commercial	cwt.	.85 @	1.00
English cliffstone	cwt.	1.50 @	1.70
Sussex	ton		
Witco	ton	20.00 @	—
Zinc Carbonate	lb.	.09½@	.10½
Zinc Stearate	lb.	.18½@	.22

MINERAL RUBBER

Genasco (factory	ton	40.00	@42.00
Granulated M. R.	ton		
Hard Hydrocarbon	ton		
Parmr, solid	ton	28.00	@48.00
Pioneer. MR, solid	ton	40.00	@42.00
Pioneer-granulated	ton	50.00	@52.00
R & H Hydro-Carbon	ton	27.05	@29.00

SOFTENERS

Acids			
Nitric, 36 degrees	cwt.	5.00 @	5.25
Sulfuric, 66 degrees	cwt.	1.60 @	1.95
Tartaric, crystals	lb.	— @	.26½
Acids, Fatty			
Laurex	lb.	.15 @	.16
Stearex	lb.	.13 @	.17
Stearic, double pressed	lb.	.17 @	.22
Alkalies			
Caustic soda, 76%	cwt.	2.90 @	—
Soda ash, 58% C.L.	cwt.	1.17½@	—
Oils			
Corn, refined, bbls.	lb.	.07 @	.08¾
Cottonseed, crude		— @	.04½
Cycline	gal.	.27 @	.34
Degras (c.l. 100 bbls.)	lb.	.03¾@	—
Less c.l. (10-25 bbls.)	lb.	.04 @	—
Lots less than 10 bbls.	lb.	.04¼@	.04½
Fluxrite	lb.	.05½@	.06½
Palm Lagos	lb.	.04 @	.05
Niger	lb.	.03½@	.04
Para-Flux	gal.	.17 @	—
Petrolatum, white	lb.	.08 @	.08½
Pigmentaroil	gal.	.18 @	.23
Pine, steam distilled	gal.	.54 @	.61
destructively distilled	gal.	.54 @	.55
Witco Palm Oil	lb.	.07½@	—
Witco Softener (f.o.b. wks.)	lb.	.02 @	—
Resins and Pitches			
Pitch, Burgundy	lb.	.06½@	.07½
coal tar	gal.	.05½@	.06
pine, 200 lb. gr. wt. bbl.		7.00 @	—
Rosin, grade K, 280 lb. bbl.		— @	4.60
Pigmentar	gal.	.18 @	.23
Tar Retort, 50 gal.	bbl.	13.50	@15.00
Solvents			
Acetone, pure	lb.	— @	.10
Alcohol, denatured,			
No. 1 bbls.	gal.	.28 @	.29
Benzol, 90%	gal.	.20 @	.21
Carbon, bisulfide	lb.	.05½@	.06¾
Carbon, tetrachloride	lb.	.06¼@	.07
Dryolene (f.o.b. Okla.)	gal.	.10 @	.10½
Gasoline, steel bbls.	gal.	.16 @	—
Naphtha, solvent	gal.	.26 @	.28
Rub-Sol (f.o.b. Okla.)	gal.	.09 @	—
Turpentine, spirits	gal.	— @	.37¼
wood	gal.	— @	.40
destructively distilled	gal.	.35 @	—
Waxes			
Beeswax, white	lb.	.34 @	.36
Carnauba	lb.	.26 @	.28
Ceresin, white	lb.	.10 @	.11
Montan, crude	lb.	.06½@	.07
Ozokerite, black	lb.	.24 @	.25
green	lb.	.26 @	.30
Paraffin (c.l.—f.o.b. N. Y.)			
Yellow crude scale	lb.	.02½@	—
White crude scale 124/126	lb.	.02½@	—
Refned, 125/127	lb.	.03¾@	—
Refined, 128/130	lb.	.03¾@	—
Refined, 135/137	lb.	.05¼@	—
Refined, 138/140	lb.	.07¼@	—

ANTI-OXIDANTS

AgeRite, Gel	lb.		
Powder	lb.		
Resin	lb.		
White	lb.		
Albasan	lb.	.70 @	.75
Antox	lb.		
B-L-E	lb.	.57 @	.60
Neozone	lb.		
Oxynone	lb.	.58 @	.60
Resistox	lb.	.54 @	.57
Retardex	lb.	.35 @	.40
Stabilite	lb.	.57 @	.62
Stabilite Alba	lb.	.70 @	.75
VGB	lb.	.55 @	.60

SPECIALTIES

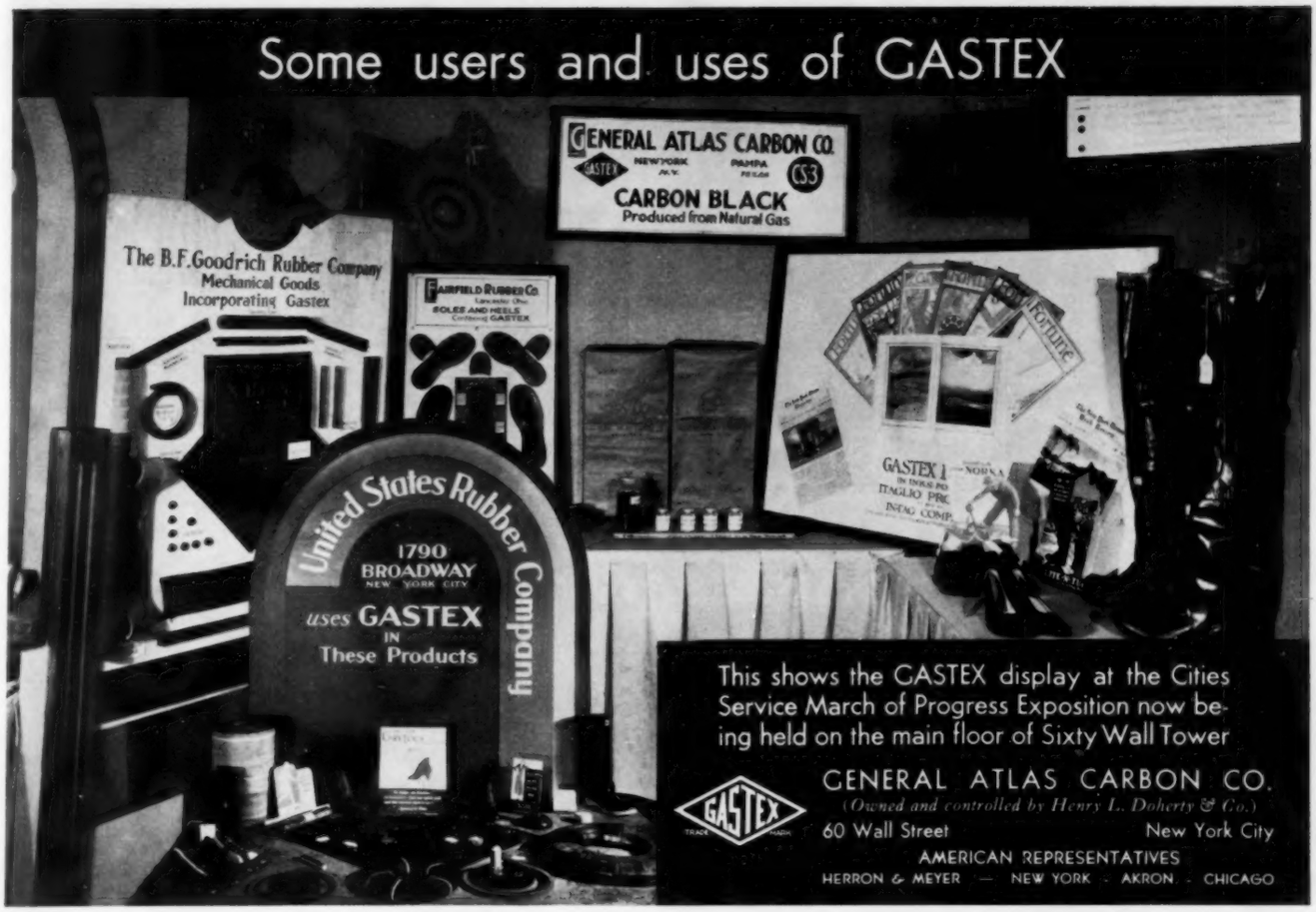
Aromatics—Rodo	lb.		
Sunproof	lb.	.35 @	.37½
Sponge Paste	lb.	— @	.30
Tonox	lb.	.56 @	.60

SUBSTITUTES

Black	lb.	.07 @	.09
White	lb.	.08 @	.14
Brown	lb.	.07 @	.11

VULCANIZING INGREDIENTS

Sulfur Chloride (drums)	lb.	.03½@	.04½
Sulfur flour,			
Ref'n'd, 100% pure (bags)	cwt.	2.40 @	2.75
Commercial (bags	cwt.	1.75 @	2.10
Telloy	lb.		
Vandex	lb.		



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